CITY OF GROSSE POINTE WOODS
NOTICE OF REGUALAR MEETING
Pension Retirement System Board of Trustees
Thursday, May 4, 2023
6:00 PM

City Hall Conference Room at 20025 Mack Plaza, Grosse Pointe Woods, MI

AGENDA

1. Call to order
2. Roll call
3. Acceptance of the meeting agenda.
4. Meeting minutes dated February 2, 2023
5. Trial Balance through March 31, 2023
6. 1st Quarter 2023 Fund Evaluation Group Report
   a. Portfolio Rebalancing to Fixed Income Strategic Target
   b. Are We There Yet-The Road to Recession
7. Foster & Foster Actuaries and Consultants-Actuarial Experience Study
8. Payment of Invoices -

a.	FEG	$14,345.00
b.	Comerica Quarterly Invoice	$ 1,500.00
c.	Rosati, Schultz, Joppich & Amtsbuechler, P.C.	$ 598.45
d.	Rosati, Schultz, Joppich & Amtsbuechler, P.C.	$ 279.45

9. New Business/Public Comment
10. Adjournment

Next Regular Board Meeting – August 3, 2023 6:00 PM

Submitted by: ____, Pension Administrator

In accordance with Public Act 267 of 1976 (Open Meetings Act), all members of the above Commission/Committee, as well as the general public, are invited to attend this meeting.

Necessary, reasonable auxiliary aids and services to aid individuals with disabilities will be provided. All such requests must be made at least five (5) days prior to a meeting. Individuals with disabilities requiring auxiliary aids or services should contact the City of Grosse Pointe Woods by writing or call the Pension Administrator at (313) 343-2604 or Telecommunications Device for the Deaf (TDD) (313) 343-9249.

MINUTES OF A REGULAR MEETING OF THE BOARD OF TRUSTEES FOR THE RETIREMENT SYSTEM (i.e. The Board) OF THE CITY OF GROSSE POINTE WOODS, HELD ON THURSDAY, FEBRUARY 2, 2023, IN THE CONFERENCE ROOM OF THE MUNICIPAL BUILDING, 20025 MACK PLAZA, GROSSE POINTE WOODS, MICHIGAN.

The meeting was called to order at 6:03 p.m. by Chairperson Mayor Bryant.

The following members were present:

- Chairperson Mayor Arthur Bryant
- Council Representative Victoria Granger
- General Employee Representative Matthew Crook (arrived at 6:23 pm)
- Public Safety Representative Brian Conigliaro
- Citizen Representative Gary Zarb

Also present:

- Pension Administrator, Shawn Murphy
- City Attorney, Debra Walling
- Pension Attorney, Michael VanOverbeke
- Fund Evaluation Group (FEG), Jeffrey Davis
- Foster & Foster Actuary, Jason Franken
- Recording Secretary, Tina Hoenicke

Motion by Granger supported by Zarb that all item's on today's agenda be received and placed on file.

Motion CARRIED by the following vote:

YES:	Bryant, Granger, Conigliaro, Zarb
NO:	None
ABSENT:	Crook

Motion by Granger, supported by Zarb to accept and place on file the minutes of the pension board meeting dated 11/3/2022.

Motion CARRIED by the following vote:

YES:	Bryant, Granger, Conigliaro, Zarb
NO:	None
ABSENT:	Crook

Motion by Granger, supported by Zarb to accept and place on file the minutes of the special pension board meeting dated 1/5/2023.

Motion CARRIED by the following vote:
YES: Bryant, Granger, Conigliaro, Zarb
NO: None
ABSENT: Crook

Motion by Granger, supported by Zarb to receive and place on file the trial balance report as presented through December 31, 2022.

Motion CARRIED by the following vote:
YES: Bryant, Granger, Conigliaro, Zarb
NO: None
ABSENT: Crook

Motion by Granger, supported by Zarb to accept and place on file the retirement application received from Elizabeth Smith effective on October 28, 2022.

The Pension Administrator confirmed that she had met the retirement provisions as prescribed in the pension ordinance.

Motion CARRIED by the following vote:
YES: Bryant, Granger, Conigliaro, Zarb
NO: None
ABSENT: Crook

Motion by Granger, supported by Zarb to accept the following actuarial reports from Foster & Foster Actuaries and Consultants for Fiscal Year ending June 30, 2022: Actuarial Valuation as of June 30, 2022, Grosses Pointe Woods Retirement System GASB 67/68 Disclosure Information as of June 30, 2022 & June 30, 2022 Summary Annual Report.

Motion CARRIED by the following vote:
YES: Bryant, Granger, Conigliaro, Zarb
NO: None
ABSENT: Crook

Motion by Granger, supported by Zarb to accept the actuarial recommendation to perform an experience study as required by Public Act 202 for a fee not to exceed $7,500.00.

Motion CARRIED by the following vote:
YES: Bryant, Granger, Conigliaro, Zarb
NO: None
ABSENT: Crook

Motion CARRIED by the following vote:
YES: Bryant, Granger, Conigliaro, Zarb
NO: None
ABSENT: Crook

Motion by Granger, supported by Zarb to receive and place on file an excerpt from the City of Grosse Pointe Woods Annual Comprehensive Financial Report for Fiscal Year End June 30, 2022.

Motion CARRIED by the following vote:
YES: Bryant, Granger, Conigliaro, Zarb
NO: None
ABSENT: Crook

General Employee Representative Matthew Crook arrived at 6:23 pm.

Motion by Crook, supported by Zarb to accept the 4th Quarter 2022 Fund Evaluation Group Report.

Motion CARRIED by the following vote:
YES: Bryant, Granger, Conigliaro, Crook, Zarb
NO: None
ABSENT: None

Jeff Davis, from FEG did not recommend any changes to the fund at this time.

Motion by Granger, supported by Conigliaro to authorize payment of the invoice from FEG in the amount of $14,425.00, Comerica in the amount of $1,500.00, Rosati, Schultz, Joppich & Amtsbuechler, PC in the amount of $130.50 and Foster & Foster Actuaries and Consultants in the amount of $1,000.00.

Motion CARRIED by the following vote:
YES: Bryant, Granger, Conigliaro, Crook, Zarb
NO: None
ABSENT: None

Motion by Crook, supported by Zarb to authorize an increase to the annual administration fee from $10,000.00 to $14,000.00 and to begin in the 2023/2024 budget year.

Motion CARRIED by the following vote:

YES:	Bryant, Granger, Conigliaro, Crook, Zarb
NO:	None
ABSENT:	None

New Business/Public Comment:

Pension Administrator, Shawn Murphy shared an update on the Age 60 Cap –a request to amend the ordinance will be discussed with the City Council at the meeting scheduled for 2/6/2023 in closed executive session per request submitted by the city attorney.

Pension Attorney, Michael VanOverbeke shared an update on current bills in Lansing in regard to the pension tax on public pensions. Specifically, SB0001 from the 2023-2024 102nd Legislature which removes the pension tax completely and House Bill #4001 which contemplates doing away with the pension tax but over a 4 year period. The Michigan Senate and House are now in committee meetings to come to an agreement regarding this pension legislation.

Other items currently being discussed in Lansing per Mr. VanOverbeke: the Open Meetings Act is in discussion to allow public meetings for non-legislative bodies to meet virtually, the FOIA Act-in regard to habitual requestors and Public Act 314 as it applies to all public retirement systems regardless of size.

Mr. VanOverbeke stated that the board doesn't have a domestic relations order policy in regard to pensions and divorce. He would like to draft a sample policy for the board to review.

Mr. VanOverbeke discussed with the board that a formal service credit policy has not previously been approved by the board and he does not feel a formal policy is necessary. Mr. VanOverbeke provided a memo to the Pension Administrator defining service credit per the pension ordinance.

Council Representative Victoria Granger left the meeting at 7:12pm.

Motion by Crook, supported by Zarb to adjourn at 7:14 pm.

Motion CARRIED by the following vote:

YES:	Bryant, Conigliaro, Crook, Zarb
NO:	None
ABSENT:	Granger

Minutes recorded by Tina Hoenicke
Approved by the Pension Board:

____
Shawn Murphy, Pension Administrator

Fund 731 PENSION FUND

GL Number	Description	Balance
*** Assets ***		
731-000-001.000	CASH	0.00
731-000-004.100	PENSION PETTY CASH	0.00
731-000-005.000	CASH	183,282.15
731-000-005.001	SCHWAB CASH	52,670.22
731-000-017.000	CASH -MERRILL LYNCH	0.00
731-000-018.000	MUTUAL FUNDS	0.00
731-000-040.000	ACCOUNT RECEIVABLE	0.00
731-000-050.000	CONTRIBUTIONS RECEIVABLE-ER	0.00
731-000-050.100	CONTRIBUTION RECEIVABLE-EE	0.00
731-000-050.200	MEDICARE CONTRIB RECEIVABLE	0.00
731-000-056.000	INTEREST REC	929.58
731-000-084.101	DUE F/GENERAL FUND	0.00
731-000-119.000	PREMIUM ON PURCHASE	0.00
731-000-120.000	US GOVT SECURTIES	0.00
731-000-121.000	BONDS	6,363,128.76
731-000-122.000	STOCKS	15,395,927.06
731-000-123.000	PREPAID EXPENSE	0.00
731-000-124.000	INDEXES	17,107,487.77
731-000-125.000	REAL ESTATE INV.	0.00
Total Assets		**39,103,425.54**
*** Liabilities ***		
731-000-202.000	ACCOUNTS PAYABLE	0.00
731-000-202.100	WEEKLY A/P	0.00
Total Liabilities		**0.00**
*** Fund Balance ***		
731-000-378.299	EMPLOYER RES-PS	0.00
731-000-390.000	CURRENT FUND BALANCE	0.00
731-000-390.100	PRIOR FUND BALANCE	4,964,534.50
731-000-390.200	RETIREE BENEFITS RES	33,151,402.56
Total Fund Balance		**38,115,937.06**
Beginning Fund Balance		**38,115,937.06**
Net of Revenues VS Expenditures		**987,488.48**
Ending Fund Balance		**39,103,425.54**
Total Liabilities And Fund Balance		**39,103,425.54**

Fund 734 SUPPLEMENTAL ANNUITY FUND

GL Number	Description	Balance
*** Assets ***		
734-000-001.000	CASH	0.00
734-000-005.000	CASH	10,793.67
734-000-005.001	SCHWAB CASH	365,677.29
734-000-006.000	CASH-TRUST	0.00
734-000-016.000	CASH	0.00
734-000-017.000	CASH -MERRILL LYNCH	0.00
734-000-056.000	INTEREST RECEIVABLE	10.89
734-000-058.000	CONTRIBUTIONS RECEIVABLE	0.00
734-000-084.101	DUE F/GENERAL FD	0.00
734-000-120.000	US GOVT SEC	0.00
734-000-121.100	BONDS	333,325.41
734-000-122.000	STOCKS	884,174.33
734-000-123.000	PREPAID EXPENSE	0.00
734-000-124.000	INDEXES	1,050,146.93
Total Assets		**2,644,128.52**
*** Liabilities ***		
734-000-202.000	ACCOUNTS PAYABLE	0.00
734-000-202.100	WEEKLY A/P	0.00
Total Liabilities		**0.00**
*** Fund Balance ***		
734-000-390.000	CURRENT FUND BALANCE	1,460,744.52
734-000-390.100	PRIOR FUND BALANCE	65,928.00
734-000-390.300	SUPPLEMENTAL ANNUITY RESERVE	788,255.00
Total Fund Balance		**2,314,927.52**
Beginning Fund Balance		**2,314,927.52**
Net of Revenues VS Expenditures		**329,201.00**
Ending Fund Balance		**2,644,128.52**
Total Liabilities And Fund Balance		**2,644,128.52**

COMPOSITE PERFORMANCE REVIEW
Report for Periods Ending March 31, 2023

City of Grosse Pointe Woods Employees Retirement System

Presented by:
Jeffrey A. Davis, CFA, CAIA
Senior Vice President

F·E·G®
investment advisors

City of Grosse Pointe Woods Employees Retirement System

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FIRST QUARTER 2023
MARKET SUMMARY

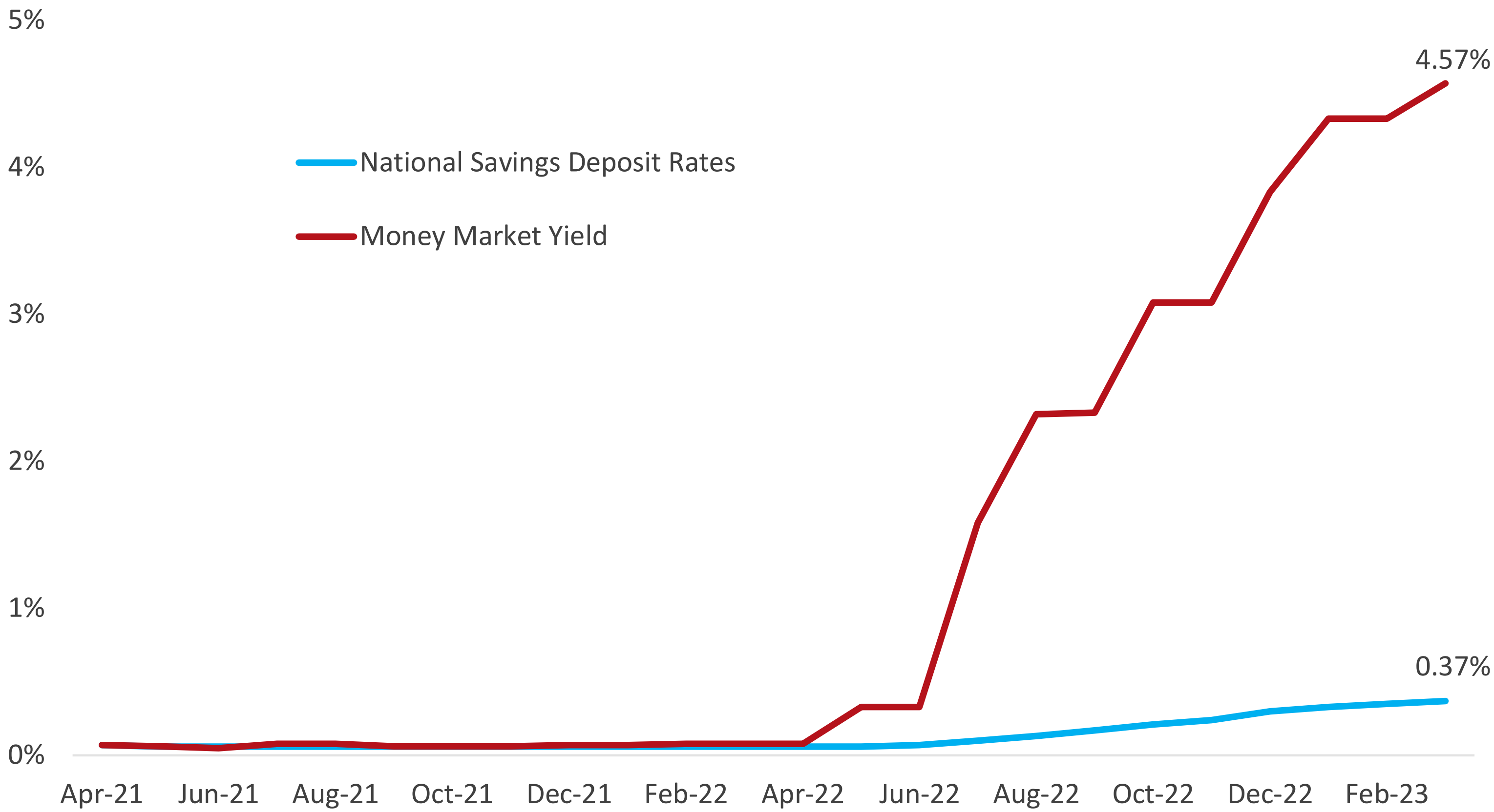
The first quarter of 2023 handed global investors much to digest. The year started with the erratic market performance of January and February, with the former witnessing broadly positive performance across most major asset classes and the latter generally the opposite. Then March's banking system turmoil took center stage. By the time the quarter concluded, however, strong gains had been generated for the breadth of the major global financial indices, despite lingering banking system concerns and a Federal Reserve (Fed) that reaffirmed its commitment to restoring price stability through a 25-basis point hike to the policy rate and hawkish near-term forward guidance.

Across the equity markets, large cap companies, particularly growth-oriented, generated the most substantial total returns, while smaller cap and value-oriented companies struggled. Bond returns were overwhelmingly positive across both rate and credit-sensitive sectors, as interest rates declined sharply and credit risk premiums narrowed. Performance across real assets for the quarter appeared dispersed yet generally positive for the major asset categories excluding broad commodity indices, which faced headwinds of strong downward momentum across crude oil and natural gas spot prices.

- The era of TINA, or "there are no alternatives" to equities, ended in 2022 as rising interest rates drove investor demand for fixed income. The end of TINA was also shown in a less obvious expression as savers reallocated funds from the banking sector to money markets.
- The first-order impact of declining bank deposits was the dramatic collapse of several banks. Second- and third-order effects are yet to be realized. However, the consensus is that tighter lending standards from banks create a credit crunch and earnings headwinds for financial institutions, as net interest margins compress from higher rates offered to depositors as a mechanism to reclaim outflows.

TINA'S DEMISE HAS BROADER IMPLICATIONS

National Savings Deposit Rates and U.S. Money Market Yield

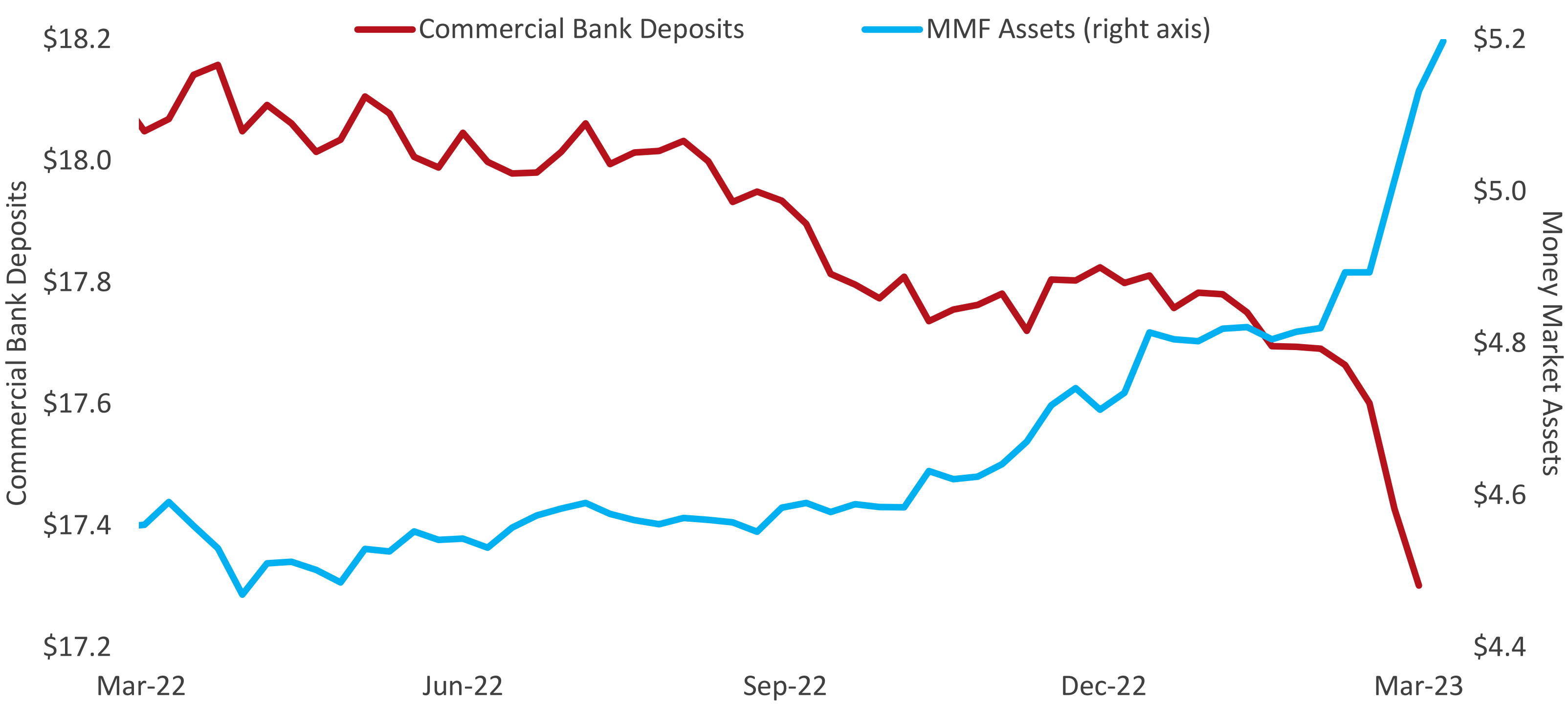


Data source: St. Louis Federal Reserve. As of March 2023

- The U.S. banking system dominated financial media in March as the failures of Silicon Valley Bank (SVB) and Signature Bank rekindled fears of contagion within the U.S. banking industry. Across the pond, Credit Suisse's longer-term operating struggles ended abruptly when Swiss authorities forced a merger with rival UBS.
- In a world dominated by banking access at one's fingertips and an abundance of real-time financial news flow, concerns about the soundness of an institution's liquidity increased the risk of a digital bank run, in which depositors flock to larger and presumably more financially sound institutions to safeguard deposits.
- In the first quarter, U.S. commercial bank deposit liabilities declined by nearly $500 billion. In contrast, total money market net assets increased by almost a similar margin, with a $463 billion increase, based on Investment Company Institute data.

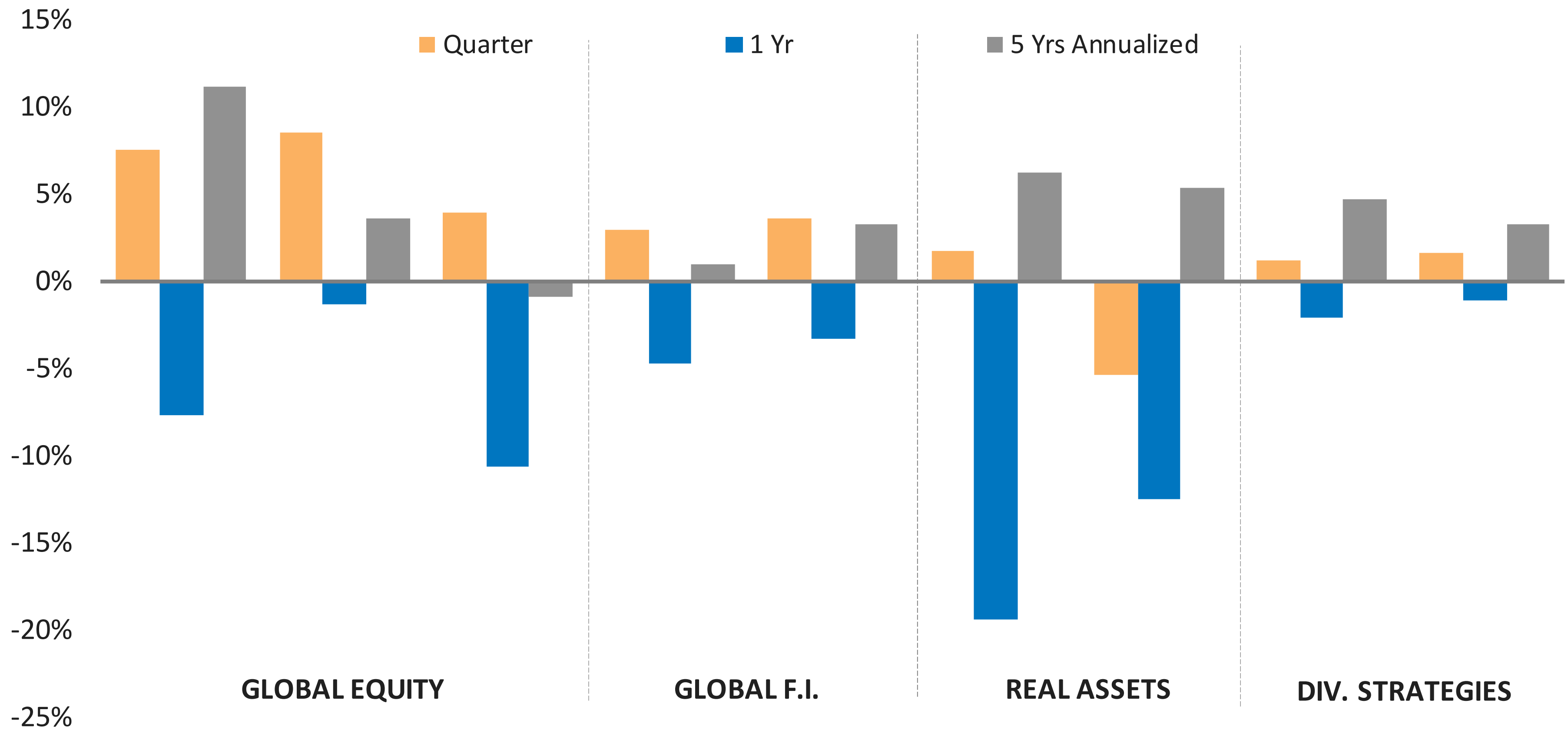
DEPOSITORS HAVE LEFT BANKS IN FAVOR OF MONEY MARKETS

Commercial Bank Deposit Liabilities and Total Money Market Fund Net Assets



Data sources: ICI, Federal Reserve, Bloomberg, L.P.; Data as of 3/22/2023

MAJOR ASSET CLASS RETURNS

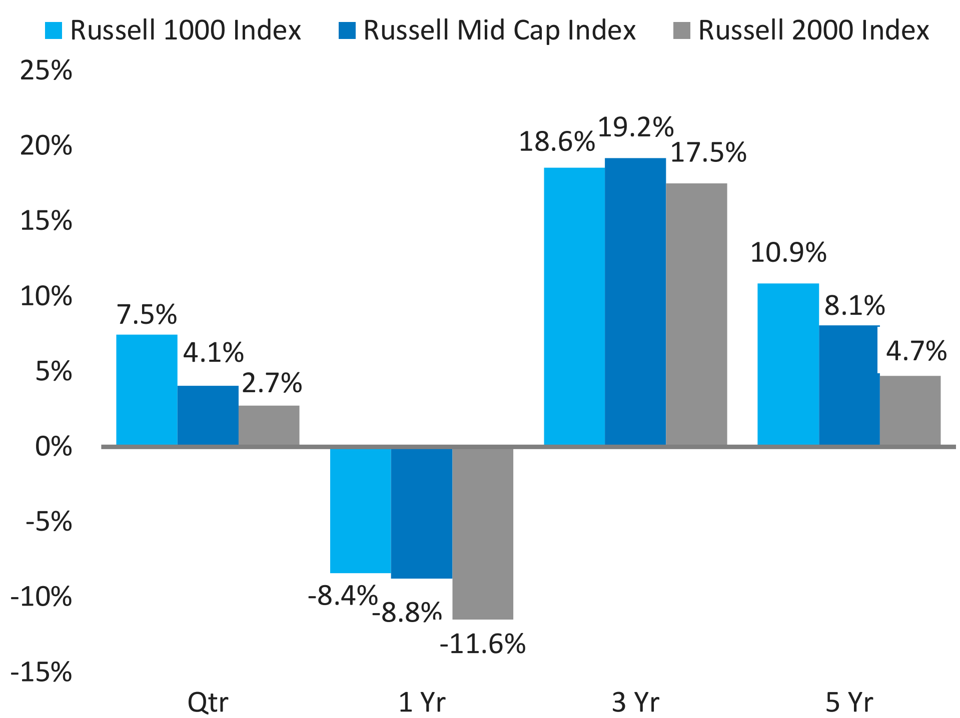


	S&P 500 Index	MSCI EAFE Index	MSCI Emerging Mkts Index	Blmbrg U.S. Agg Index	Blmbrg HY Index	FTSE NAREIT All Equity Index	Blmbrg Cmdty Index	HFRI Fund Wtd Comp. Index	HFRI Fund of Fund Index
Quarter	7.5%	8.5%	4.0%	3.0%	3.6%	1.7%	-5.4%	1.2%	1.6%
1 Yr	-7.7%	-1.4%	-10.7%	-4.8%	-3.3%	-19.4%	-12.5%	-2.1%	-1.1%
5 Yrs Annualized	11.2%	3.6%	-0.9%	0.9%	3.2%	6.3%	5.4%	4.7%	3.3%

Data sources: Lipper and Hedge Fund Research, data as of the fifth business day following quarter-end

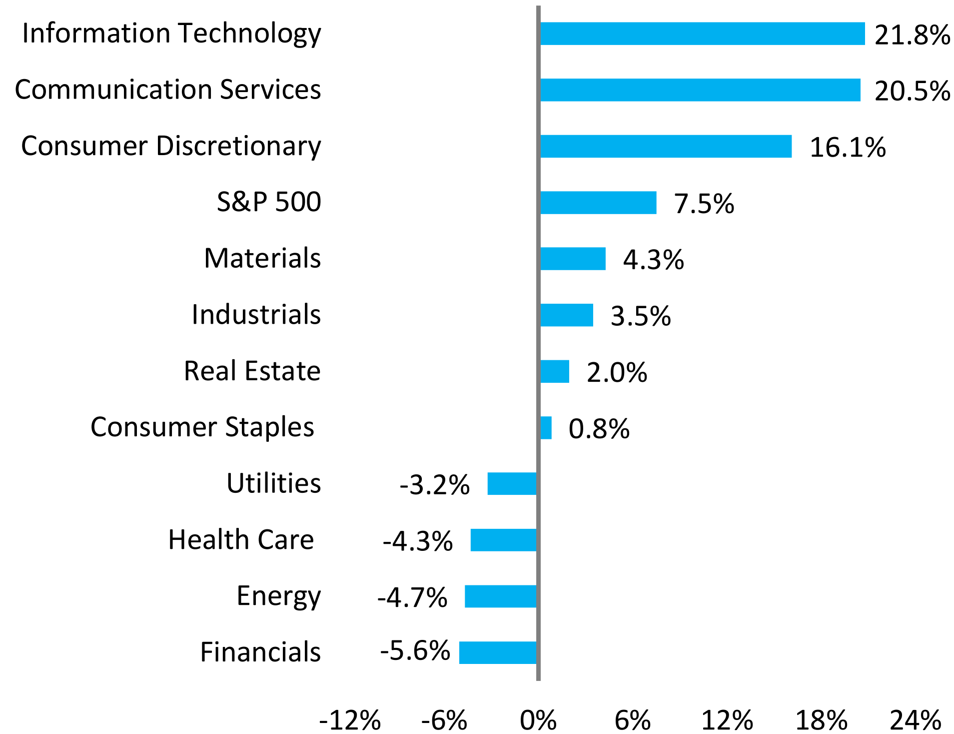
- Global stock markets finished the first quarter with positive returns. Growth equity outperformed value equity, and large cap stocks outperformed small cap stocks.
- S&P 500 earnings-per-share estimates declined at a larger-than-average rate for the first quarter, decreasing by 6.6%. This marked the most significant earnings decline reported since the second quarter of 2020 (-31.8%). Full-year 2023 estimates were also revised lower, decreasing 3.8%.
- The information technology and communication services sectors were the best-performing, as growth companies benefitted from declining interest rates. Financials finished the quarter as the worst-performing sector, down 5.6%, as the collapse of Silicon Valley Bank created concerns about possible systemic risk within the regional banking industry.

LARGE CAP, MID CAP, AND SMALL CAP



Data source: Russell

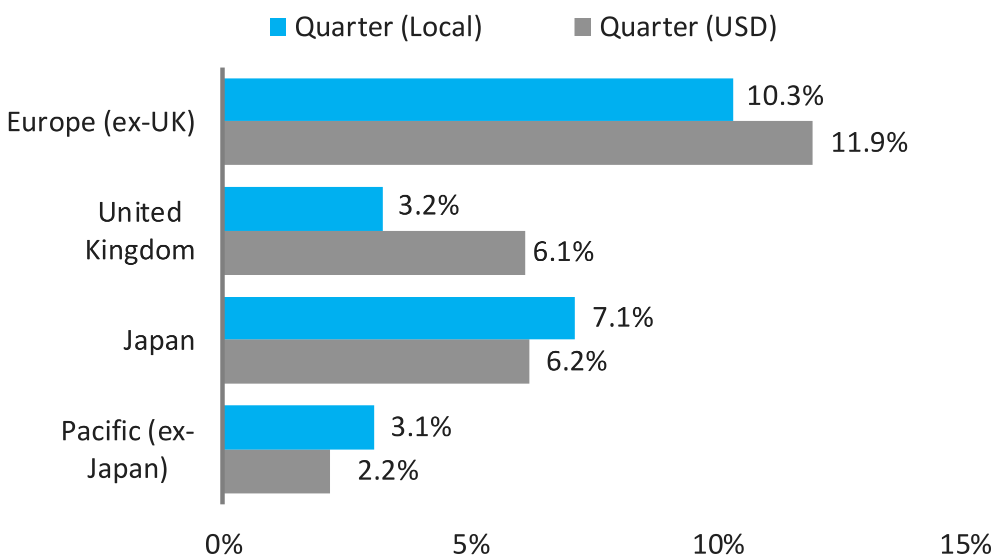
S&P 500 SECTOR PERFORMANCE



Data source: Factset

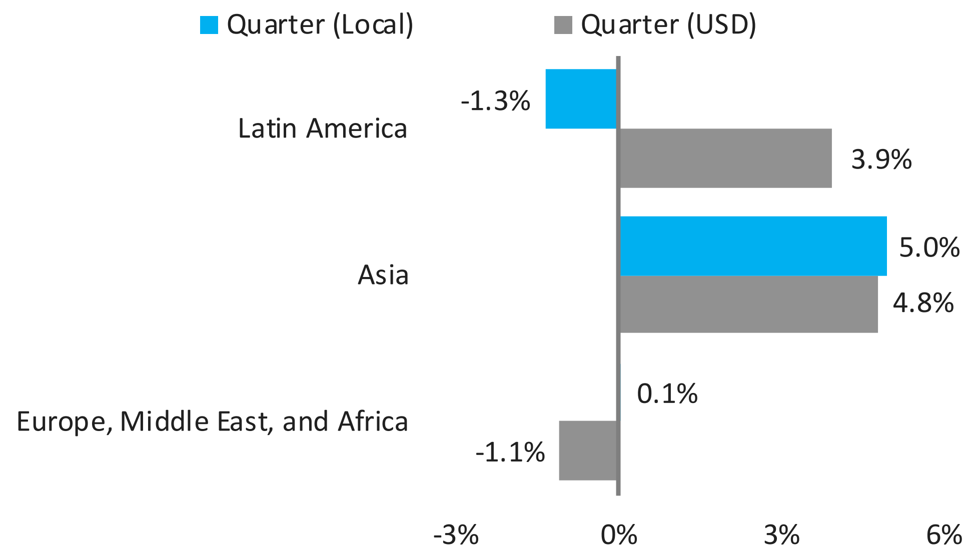
- European equities finished the quarter with solid returns led by the information technology, consumer discretionary, and communication services sectors. Despite a volatile March, financials finished the quarter with positive returns as Credit Suisse's issues were considered company-specific.
- In the United Kingdom (UK), equity returns were mixed by sector. The most recent quarterly gross domestic product (GDP) data from the Office of National Statistics showed that the UK economy did not contract in the fourth quarter of 2022, beating consensus expectations, which benefitted cyclical sectors.
- Japanese equities produced positive returns. In February, the Tokyo Stock Exchange requested companies trading below book value to develop capital improvement plans. About 33% of Topix 100 members have price-to-book ratios below 1, compared to only 3% of constituents within the S&P 500.
- Emerging markets equities posted positive results despite volatility over the quarter. To start the year, China re-opening provided a positive backdrop for emerging markets which reversed with U.S.-China tensions escalating in February and March. Continued optimism around easing regulatory pressure served as a tailwind for the information technology and communication services sectors, supporting returns in both sectors.

MSCI EAFE REGIONAL QUARTERLY RETURNS



Data source: MSCI Barra

MSCI EM REGIONAL QUARTERLY RETURNS

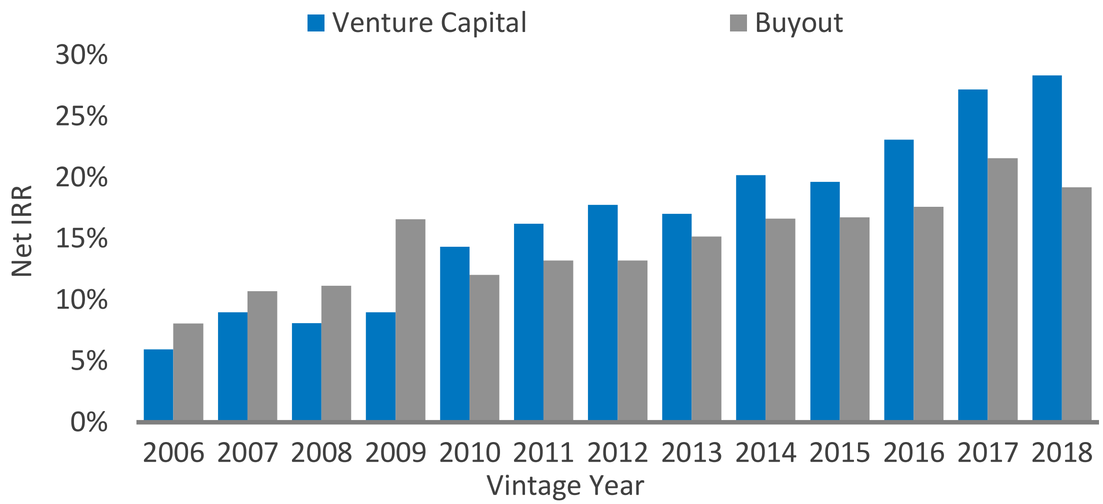


Data source: MSCI Barra

- Private equity reports performance on a lag; the latest data available are through September 30, 2022.
- The public market volatility during 2022 has not yet been fully reflected in private equity return data. We believe industry performance will likely return to more normalized levels if public market valuations remain under pressure.
- Median private equity returns for venture capital and buyout funds have generally been 15% or better since the 2013 vintage year, with venture returns for recent vintage years over 25%.
- Median buyout fund performance exceeded that of venture funds for most of the 2000s through the 2009 vintage year. This dynamic reversed in the subsequent decade's vintage years, with venture funds generally performing better than buyout funds.
- Fundraising activity for venture capital and buyout funds was strong to start 2022. Fundraising and investment slowed in the second half of last year as exit activity returned to more typical levels.

MEDIAN VENTURE CAPITAL AND BUYOUT VINTAGE YEAR IRR

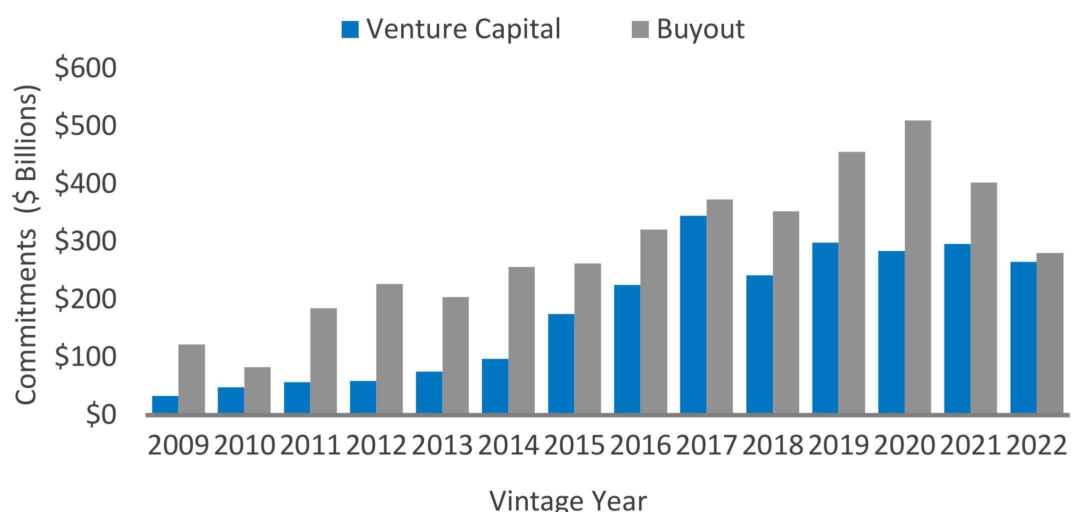
As of September 30, 2022



Data source: Thomson One; the most recent return information available is through September 30, 2022

VENTURE CAPITAL AND BUYOUT FUNDRAISING ACTIVITY

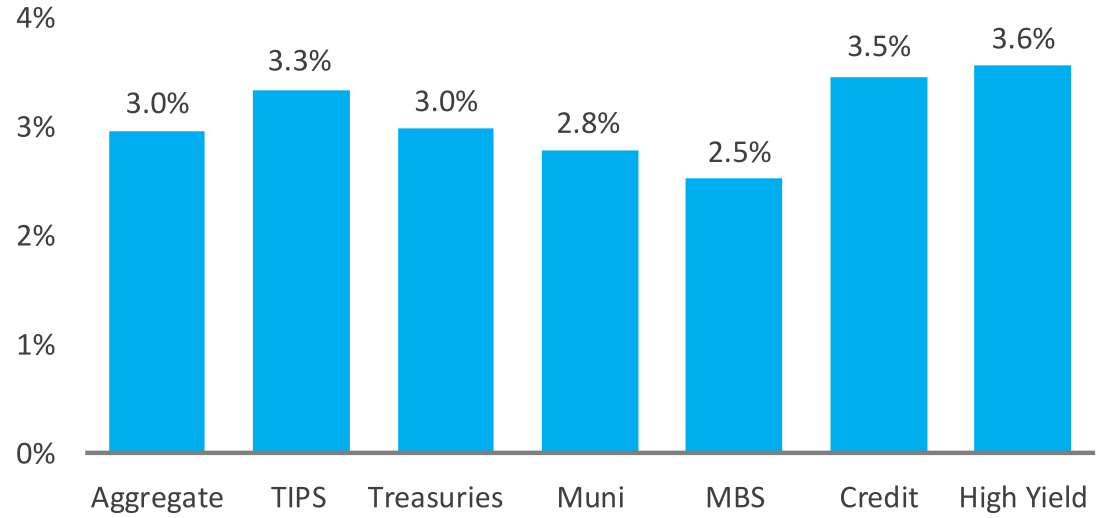
As of December 31, 2022



Data source: Pitchbook

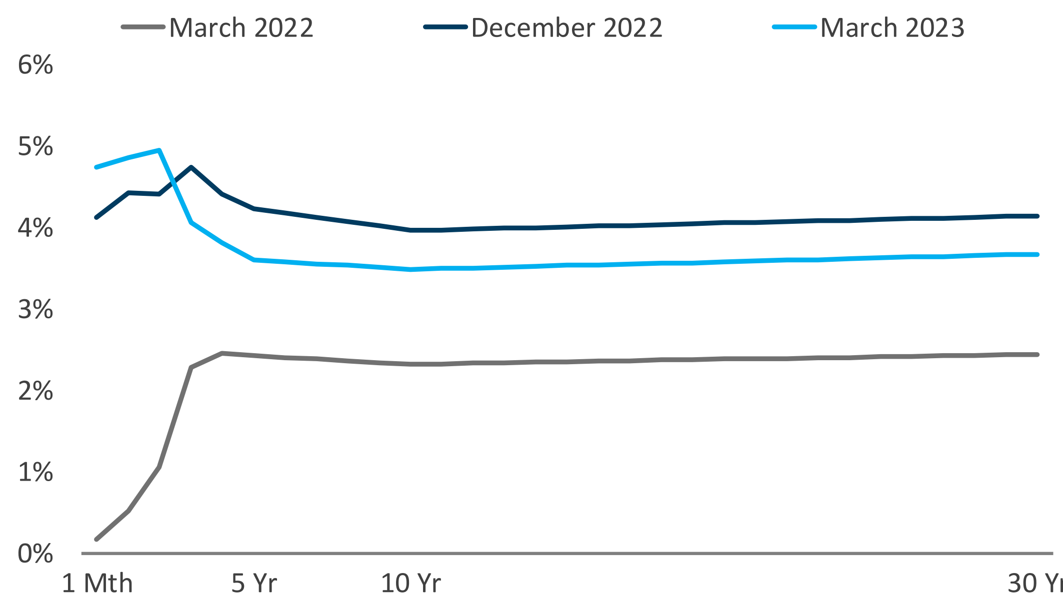
- The year started with a rally in rates amid expectations of more dovish monetary policy. The Fed's hawkish commentary quickly shattered those expectations. Rates saw another rally in March, with the stress in the banking sector inducing a flight to quality.
- The yield curve remained inverted with expanding gaps between market expectations and the Federal Open Market Committee's (FOMC) outlook for the Fed Funds target range.
- Corporate spreads remained resilient during the quarter except for the period following the collapse of several large banks when spreads saw significant widening before ending the quarter strong.
- Structured credit markets have witnessed scattered pressures. Residential mortgage-backed securities (RMBS) came under pressure in 2022 as mortgage rates reacted to rapid rate hikes. The pressure has now moved to the commercial mortgage-backed securities (CMBS) sector, with wide spreads and low prices not experienced for quite some time.

BLOOMBERG U.S. FIXED INCOME INDEX RETURNS



Data source: FactSet

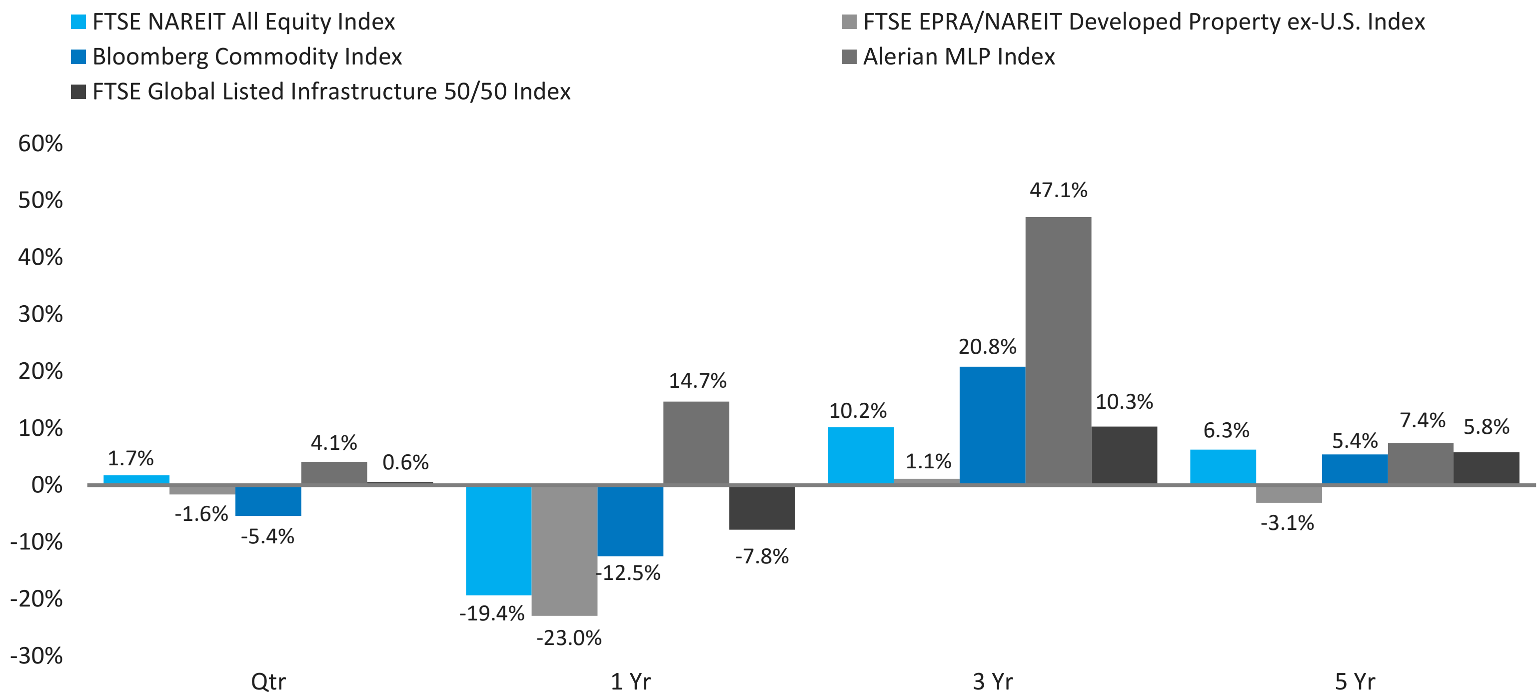
U.S. TREASURY YIELD CURVE



Data source: FactSet

- Global real estate returns were lackluster in the first quarter. In early March, investors grappled with widespread concerns that regional and mid-sized banks would fail in part due to their exposure to commercial real estate. Real estate indices sold off steeply before recovering by the end of the month.
- On Sunday, April 2, OPEC+ unexpectedly announced additional production cuts of more than 1 million barrels per day (MMbpd). West Texas Intermediate oil futures prices jumped the following Monday, pressuring oil above $80 per barrel. The cut brings the total volume of cuts by OPEC+ to 3.66 MMbpd, or 3.7% of global demand.
- With improved balance sheets, strong free cash flows, and relatively higher energy prices, the midstream energy infrastructure sector has seen a notable uptick in mergers and acquisitions.

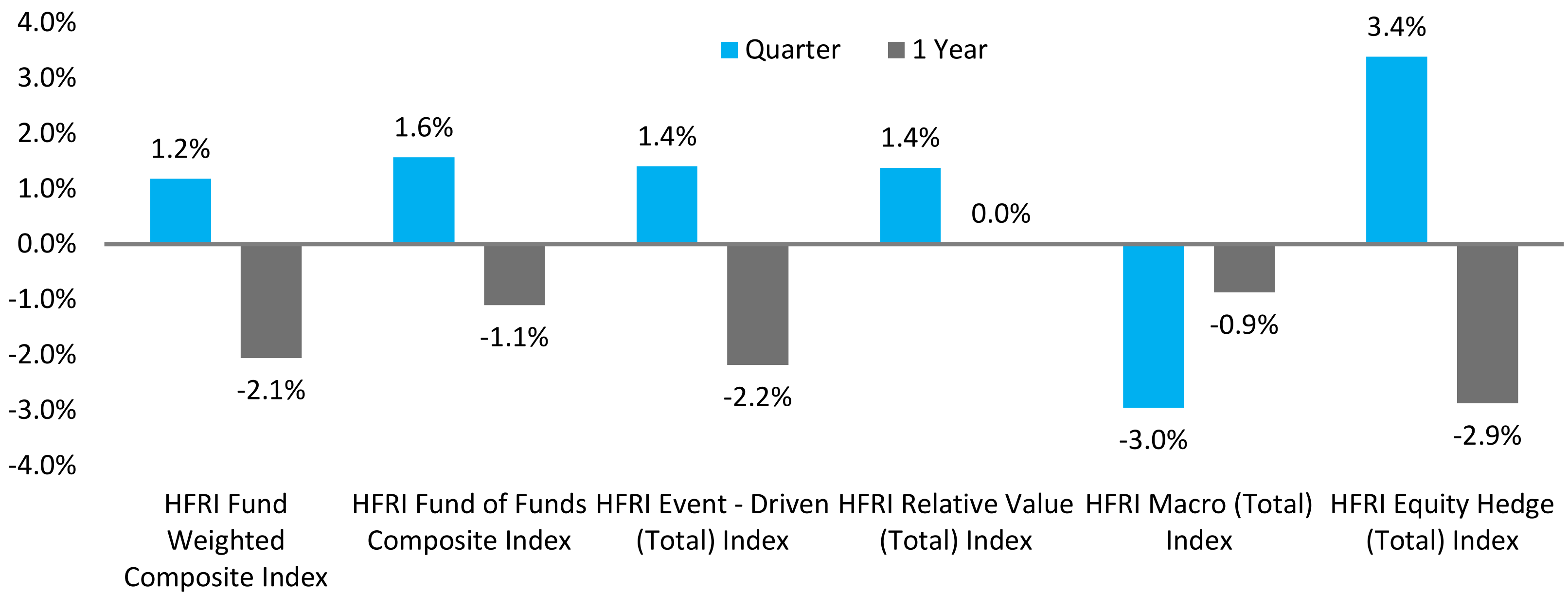
PUBLIC REAL ASSETS – REAL ESTATE, COMMODITIES, MLPs, AND INFRASTRUCTURE



Data sources: NAREIT, FactSet, and Alerian

- Over the quarter, hedge funds provided positive returns, with the HFRI Fund Weighted Composite Index up 1.2%. The only strategy in negative territory was global macro, which continued its string of poor performance.
- Hedged equity was the best-performing strategy, up 3.4% over the quarter. Fundamental value and fundamental growth indices led all other hedged equity strategies. Quantitative directional notably had a positive first quarter, even after a particularly poor performance in February. However, the energy/basic materials index reversed from last quarter's positive performance, down almost 2%.
- Trend-following managers' performance varied throughout the quarter. The divergence in performance was primarily driven by market volatility, specifically in equity markets. The equity exposure of systematic investors last month surpassed discretionary funds for the first time in almost 18 months.
- Due to interest rate uncertainty, multi-strategy funds operated at lower gross leverage multiples. Multi-strategies maintained large cash balances, intending to capitalize on an increase in deal flow or distressed opportunities. Opportunistic strategies shifted allocations towards relative value trades due to reduced merger and acquisition activity, particularly among large cap companies.

HFRI INDICES PERFORMANCE RETURNS IN U.S. DOLLARS



Data source: HFRI

City of Grosse Pointe Woods Employees Retirement System

Summary of Investment Performance

Report for Periods Ending March 31, 2023

	Qtr	FYTD	1Yr	3Yr (Annualized)	5Yr (Annualized)	7Yr (Annualized)	10Yr (Annualized)	Since Inception	Date	Market Value
Total Composite	**5.3%**	**6.8%**	**-6.7%**	**12.8%**	**5.1%**	**6.6%**	**5.8%**	**5.6%**	*1/05*	*$41,552,538*
Target Weighted Index [1]	5.0	7.0	-6.1	11.5	4.7	6.5	5.5	6.0		
Broad Policy Index [2]	6.0	6.9	-6.4	9.8	5.4	6.8	6.2	6.0		
Actuarial Rate [3]	1.8	5.6	7.5	7.5	7.6	7.7	7.7	7.7		
Domestic Equity										
iShares S&P 500 Index	**7.5**	**10.0**	**-7.8**	**18.6**	**11.2**	**12.4**	**-**	**10.8**	*8/14*	*12,993,828*
S&P 500 Index	7.5	10.0	-7.7	18.6	11.2	12.4	-	10.8		
S&P 500 Equal Weighted Index	2.4	7.8	-8.1	19.8	7.8	9.1	-	7.5		
iShares Russell Midcap Index	**4.0**	**9.6**	**-8.9**	**19.0**	**7.9**	**9.7**	**-**	**8.6**	*9/14*	*2,070,541*
Russell Midcap Index	4.1	9.7	-8.8	19.2	8.1	9.9	-	8.8		
Small Cap Equity										
Vanguard S&P Small Cap 600 Index	**2.5**	**6.1**	**-8.9**	**21.6**	**-**	**-**	**-**	**8.9**	*8/19*	*3,093,266*
S&P SmallCap 600 Index	2.6	6.2	-8.8	21.7	-	-	-	8.9		
International Equity										
EuroPacific Growth Fund	**9.9**	**13.3**	**-3.4**	**12.0**	**3.1**	**6.9**	**-**	**5.1**	*9/14*	*4,128,821*
MSCI AC World Index ex-US	6.9	10.0	-5.1	11.8	2.5	5.9	-	3.6		
Templeton Inst'l Foreign Smaller Co.	**7.7**	**8.8**	**-5.4**	**13.5**	**-0.3**	**4.3**	**-**	**3.4**	*9/14*	*1,046,520*
MSCI Small Cap EAFE Index	4.9	9.5	-9.8	12.1	0.9	5.3	-	5.1		
Brown International Small Company	**6.5**	**10.7**	**-9.3**	**-**	**-**	**-**	**-**	**-12.4**	*5/21*	*997,012*
MSCI Small Cap EAFE Index	4.9	9.5	-9.8	-	-	-	-	-10.3		
MSCI ACWI ex-U.S. Small Cap Index	4.7	8.7	-10.4	-	-	-	-	-9.1		
Redwheel Global Emerging Equity Fund	**3.7**	**-0.4**	**-12.0**	**11.5**	**-2.2**	**-**	**-**	**-2.7**	*2/18*	*1,213,268*
DFA Emerging Markets Fund	**5.3**	**2.5**	**-9.1**	**11.9**	**0.1**	**5.5**	**-**	**2.8**	*9/14*	*2,688,085*
MSCI Emerging Markets Index	4.0	0.8	-10.7	7.8	-0.9	4.9	-	2.2		

City of Grosse Pointe Woods Employees Retirement System

Summary of Investment Performance

Report for Periods Ending March 31, 2023

	Qtr	FYTD	1Yr	Annualized 3Yr	Annualized 5Yr	Annualized 7Yr	Annualized 10Yr	Annualized Since Inception	Date	Market Value
Fixed Income										
Dodge & Cox Income Fund	**3.1%**	**1.7%**	**-3.0%**	**0.1%**	**-**	**-**	**-**	**1.7%**	*2/19*	*$2,344,470*
Bloomberg IG Credit Index	3.3	1.2	-5.4	-1.6	-	-	-	1.1		
Bloomberg U.S. Aggregate Index	3.0	-0.1	-4.8	-2.8	-	-	-	0.5		
DoubleLine Total Return Bond Fund	**3.3**	**-1.2**	**-5.1**	**-1.7**	**-**	**-**	**-**	**-0.2**	*2/19*	*2,086,195*
Bloomberg U.S. MBS Index	2.5	-0.9	-4.9	-3.3	-	-	-	-0.5		
Bloomberg U.S. Aggregate Index	3.0	-0.1	-4.8	-2.8	-	-	-	0.5		
Vanguard Total Bond Fund	**3.2**	**0.0**	**-4.7**	**-2.8**	**-**	**-**	**-**	**0.5**	*2/19*	*2,265,789*
Bloomberg U.S. Aggregate Index	3.0	-0.1	-4.8	-2.8	-	-	-	0.5		
Low Volatility										
Gateway Fund	**5.2**	**5.9**	**-4.2**	**7.2**	**-**	**-**	**-**	**3.0**	*8/18*	*1,707,652*
PIMCO All Asset Fund	**3.2**	**3.9**	**-6.7**	**10.9**	**-**	**-**	**-**	**5.7**	*11/18*	*1,381,115*
HFRX Equity Hedge Index	0.8	2.4	-2.1	9.7	-	-	-	4.6		
Real Estate										
Principal Real Estate Securities Fund	**3.3**	**-3.3**	**-18.5**	**10.5**	**6.7**	**5.3**	**-**	**7.3**	*9/14*	*885,476*
FTSE NAREIT Equity REIT Index	2.7	-2.7	-19.2	12.1	6.0	4.1	-	6.1		
FTSE NAREIT All Equity Index	1.7	-5.5	-19.4	10.2	6.3	5.0	-	6.7		
Natural Resources										
Tortoise MLP & Pipeline Fund	**0.4**	**11.4**	**0.4**	**33.9**	**6.5**	**-**	**-**	**4.3**	*8/17*	*1,064,178*
Alerian MLP Index	4.1	23.8	14.7	47.1	7.4	-	-	4.3		
Tortoise North American Pipeline Index	0.2	4.6	-2.8	28.7	9.1	-	-	6.5		
Cohen & Steers Global Listed Infrastructure	**0.8**	**0.1**	**-**	**-**	**-**	**-**	**-**	**-5.3**	*5/22*	*1,167,974*
FTSE Global Core Infrastructure 50/50	0.6	-0.3	-	-	-	-	-	-6.4		
DJ Brookfield Global Infrastructure Index	3.1	1.2	-	-	-	-	-	-6.6		
Cash										
Schwab Government Money Fund	**1.0**	**2.2**	**2.3**	**0.8**	**1.1**	**0.8**	**-**	**0.7**	*7/14*	*418,348*
U.S. 91-Day Treasury Bills	1.1	2.8	3.1	1.1	1.4	1.2	-	1.0		

City of Grosse Pointe Woods Employees Retirement System

Summary of Investment Performance

Report for Periods Ending March 31, 2023

	Qtr	FYTD	1Yr	Annualized 3Yr	5Yr	7Yr	10Yr	Since Inception	Date	Market Value
Long Term Manager Performance										
Domestic Equity										
iShares S&P 500 Index	**7.5%**	**10.0%**	**-7.8%**	**18.6%**	**11.2%**	**12.4%**	**12.2%**	**9.2%**	*1/05*	
S&P 500 Index	7.5	10.0	-7.7	18.6	11.2	12.4	12.2	9.3		
S&P 500 Equal Weighted Index	2.4	7.8	-8.1	19.8	7.8	9.1	9.3	7.8		
iShares Russell Midcap Index	**4.0**	**9.6**	**-8.9**	**19.0**	**7.9**	**9.7**	**9.9**	**9.0**	*1/05*	
Russell Midcap Index	4.1	9.7	-8.8	19.2	8.1	9.9	10.1	9.2		
Vanguard S&P Small Cap 600 Index	**2.5**	**6.1**	**-8.9**	**21.6**	**6.2**	**9.6**	**9.8**	**11.4**	*9/10*	
S&P SmallCap 600 Index	2.6	6.2	-8.8	21.7	6.3	9.6	9.9	11.5		
International Equity										
EuroPacific Growth Fund	**9.9**	**13.3**	**-3.4**	**12.0**	**3.1**	**6.9**	**5.9**	**5.1**	*8/08*	
MSCI AC World Index ex-U.S.	6.9	10.0	-5.1	11.8	2.5	5.9	4.2	3.4		
Templeton Inst'l Foreign Smaller Co.	**7.7**	**8.8**	**-5.4**	**13.5**	**-0.3**	**4.3**	**4.1**	**6.4**	*1/05*	
MSCI Small Cap EAFE Index	4.9	9.5	-9.8	12.1	0.9	5.3	5.8	5.7		
Brown International Small Company	**6.5**	**10.7**	**-9.3**	**13.1**	**5.8**	**11.6**	**-**	**11.2**	*9/15*	
MSCI Small Cap EAFE Index	4.9	9.5	-9.8	12.1	0.9	5.3	-	5.7		
MSCI ACWI ex-U.S. Small Cap Index	4.7	8.7	-10.4	15.0	1.7	5.7	-	6.1		
Redwheel Global Emerging Equity Fund	**4.0**	**0.3**	**-12.0**	**12.3**	**-1.4**	**6.7**	**5.6**	**6.4**	*7/12*	
MSCI Emerging Markets Index	4.0	0.8	-10.7	7.8	-0.9	4.9	2.0	2.8		
DFA Emerging Markets Fund	**5.3**	**2.5**	**-9.1**	**11.9**	**0.1**	**5.5**	**2.5**	**6.2**	*1/05*	
MSCI Emerging Markets Index	4.0	0.8	-10.7	7.8	-0.9	4.9	2.0	5.9		
Fixed Income										
Dodge & Cox Income Fund	**3.1**	**1.7**	**-3.0**	**0.1**	**1.9**	**2.3**	**2.4**	**3.9**	*1/05*	
Bloomberg IG Credit Index	3.3	1.2	-5.4	-1.6	1.4	1.6	2.1	3.6		
Bloomberg U.S. Aggregate Index	3.0	-0.1	-4.8	-2.8	0.9	0.9	1.4	3.1		
DoubleLine Total Return Bond Fund	**3.3**	**-1.2**	**-5.1**	**-1.7**	**0.4**	**0.8**	**1.5**	**3.6**	*4/10*	
Bloomberg U.S. MBS Index	2.5	-0.9	-4.9	-3.3	0.2	0.3	1.0	1.7		
Bloomberg U.S. Aggregate Index	3.0	-0.1	-4.8	-2.8	0.9	0.9	1.4	2.2		
Vanguard Total Bond Fund	**3.2**	**0.0**	**-4.7**	**-2.8**	**0.9**	**0.9**	**1.3**	**3.1**	*1/05*	
Bloomberg U.S. Aggregate Index	3.0	-0.1	-4.8	-2.8	0.9	0.9	1.4	3.1		

City of Grosse Pointe Woods Employees Retirement System

Summary of Investment Performance

Report for Periods Ending March 31, 2023

				Annualized						
	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Date	Market Value
<u>**Low Volatility**</u>										
Gateway Fund	**5.2%**	**5.9%**	**-4.2%**	**7.2%**	**3.9%**	**4.7%**	**4.3%**	**4.1%**	*1/05*	
PIMCO All Asset Fund	**3.2**	**3.9**	**-6.7**	**10.9**	**4.0**	**5.9**	**3.8**	**5.2**	*1/05*	
HFRX Equity Hedge Index	0.8	2.4	-2.1	9.7	2.6	3.8	2.8	1.4		
<u>**Real Estate**</u>										
Principal Real Estate Securities Fund	**3.3**	**-3.3**	**-18.5**	**10.5**	**6.7**	**5.3**	**7.4**	**8.3**	*1/05*	
FTSE NAREIT Equity REIT Index	2.7	-2.7	-19.2	12.1	6.0	4.1	6.0	7.2		
FTSE NAREIT All Equity Index	1.7	-5.5	-19.4	10.2	6.3	5.0	6.5	7.5		
<u>**Natural Resources**</u>										
Tortoise MLP & Pipeline Fund	**0.4**	**11.4**	**0.4**	**33.9**	**6.5**	**7.1**	**3.2**	**6.1**	*5/11*	
Alerian MLP Index	4.1	23.8	14.7	47.1	7.4	5.6	0.6	3.2		
Tortoise North American Pipeline Index	0.2	4.6	-2.8	28.7	9.1	8.9	5.6	-		
Cohen & Steers Global Listed Infrastructure	**0.8**	**0.1**	**-6.8**	**10.3**	**6.6**	**6.7**	**6.8**	**6.8**	*1/05*	
FTSE Global Core Infrastructure 50/50	0.6	-0.3	-7.8	10.3	5.8	6.2	6.2	-		
DJ Brookfield Global Infrastructure Index	3.1	1.2	-6.1	12.2	5.6	5.7	5.2	8.1		
<u>**Cash**</u>										
Schwab Government Money Fund	**1.0**	**2.2**	**2.3**	**0.8**	**1.1**	**0.8**	**0.6**	**1.0**	*1/05*	
U.S. 91-Day Treasury Bills	1.1	2.8	3.1	1.1	1.4	1.2	0.9	1.2		

City of Grosse Pointe Woods Employees Retirement System

Summary of Investment Performance

Report for Periods Ending March 31, 2023

Footnotes:

* Performance returns are net of investment management fees.

* Calculated returns may differ from the manager's due to differences in security pricing and/or cash flows.

* Manager and index data represent the most current available at the time of report publication.

* For managers and indices that report returns on a lag, 0.0% is utilized for the most recent time period until the actual return data are reported.

* The fiscal year ends in June.

[1] Target Weighted Index is currently comprised of: 30.0% Russell 1000 Index, 5.0% Russell Midcap Index, 7.0% Russell 2000 Index, 10.0% MSCI EAFE Index, 5.0% MSCI Small Cap EAFE Index, 10.0% MSCI Emerging Markets Index, 20.0% Bloomberg U.S. Aggregate Index, 3.0% Alerian MLP Index, 3.0% FTSE NAREIT All Equity Index, and 7.0% HFRI FOF: Conservative Index. Please see Appendix for benchmark history.

[2] Broad Policy Index is comprised of: 70.0% MSCI AC World Index and 30.0% Bloomberg U.S. Aggregate Index.

[3] Actuarial Rate is currently comprised of: 100.0% 7.5% Absolute Return. Please see Appendix for benchmark history.

[A] RWC Global Emerging Equity Fund (LT) uses longer term composite returns for performance evaluation rather than the shorter-term mutual fund returns.

City of Grosse Pointe Woods Employees Retirement System

Schedule of Asset and Style Allocation

Asset Class	Current Weight	Target Weight	Target Range
Large Cap Equity	31.3%	30.0%	5.0% - 35.0%
Mid Cap Equity	5.0%	5.0%	0.0% - 15.0%
Small Cap Equity	7.4%	7.0%	5.0% - 30.0%
International Equity	9.9%	10.0%	5.0% - 25.0%
International Small Cap Equity	4.9%	5.0%	0.0% - 15.0%
Emerging Markets	9.4%	10.0%	5.0% - 20.0%
Fixed Income	16.1%	20.0%	5.0% - 30.0%
Public Real Estate	2.1%	3.0%	0.0% - 10.0%
Public Natural Resources	5.4%	3.0%	0.0% - 10.0%
Low Volatility	7.4%	7.0%	0.0% - 20.0%
Cash	1.0%	0.0%	0.0% - 5.0%
Total	**100.0%**	**100.0%**	

City of Grosse Pointe Woods Employees Retirement System

Schedule of Asset and Style Allocation

Asset Class - Style	Manager	Portfolio Invested	Portfolio Cash	Market Value	Current Weight
Large Cap Equity - Broad	iShares S&P 500 Index	100.0%	0.0%	$12,993,828	31.3%
Mid Cap Equity - Broad	iShares Russell Midcap Index	100.0%	0.0%	$2,070,541	5.0%
Small Cap Equity - Broad	Vanguard S&P Small Cap 600 Index	100.0%	0.0%	$3,093,266	7.4%
International Equity - Core	EuroPacific Growth Fund	100.0%	0.0%	$4,128,821	9.9%
International Small Cap Equity - Core	Brown International Small Company	100.0%	0.0%	$997,012	2.4%
International Small Cap Equity - Core	Templeton Inst'l Foreign Smaller Co.	100.0%	0.0%	$1,046,520	2.5%
Emerging Markets - Core	DFA Emerging Markets Fund	100.0%	0.0%	$2,688,085	6.5%
Emerging Markets - Growth	Redwheel Global Emerging Equity Fund	100.0%	0.0%	$1,213,268	2.9%
Fixed Income - Core	Dodge & Cox Income Fund	100.0%	0.0%	$2,344,470	5.6%
Fixed Income - Core	Vanguard Total Bond Fund	100.0%	0.0%	$2,265,789	5.5%
Fixed Income - Core Plus	DoubleLine Total Return Bond Fund	100.0%	0.0%	$2,086,195	5.0%
Public Real Estate - Equity	Principal Real Estate Securities Fund	100.0%	0.0%	$885,476	2.1%
Public Natural Resources - Infrastructure	Cohen & Steers Global Listed Infrastructure	100.0%	0.0%	$1,167,974	2.8%
Public Natural Resources - MLP	Tortoise MLP & Pipeline Fund	100.0%	0.0%	$1,064,178	2.6%
Low Volatility - Liquid	Gateway Fund	100.0%	0.0%	$1,707,652	4.1%
Low Volatility - Tactical	PIMCO All Asset Fund	100.0%	0.0%	$1,381,115	3.3%
Cash - Cash	Schwab Government Money Fund	100.0%	0.0%	$418,348	1.0%
Total				**$41,552,538**	**100.0%**

City of Grosse Pointe Woods Employees Retirement System

Investment Metrics

Report for Periods Ending March 31, 2023

Statistical Measures	Sharpe Ratio	Standard Deviation	Tracking Error	Information Ratio
Total Composite	**0.2**	**15.6%**	**2.5%**	**-0.1**
Target Weighted Index	0.2	14.7	2.0	0.3
Broad Policy Index	0.3	14.0	0.0	--

Asset Growth Summary (in thousands)	Qtr	FYTD
Beginning Market Value	$ 39,957	$ 40,242
Net Contributions/(Distributions)	$ (530)	$ (1,256)
Market Appreciation/(Depreciation)	**$ 2,126**	**$ 2,567**
Ending Market Value	**$ 41,553**	**$ 41,553**

* Risk Statistics are based on monthly data.

* Target Weighted Index is currently comprised of: 30.0% Russell 1000 Index, 5.0% Russell Midcap Index, 7.0% Russell 2000 Index, 10.0% MSCI EAFE Index, 5.0% MSCI Small Cap EAFE Index, 10.0% MSCI Emerging Markets Index, 20.0% Bloomberg U.S. Aggregate Index, 3.0% Alerian MLP Index, 3.0% FTSE NAREIT All Equity Index, and 7.0% HFRI FOF: Conservative Index. Please see Appendix for benchmark history.

* Broad Policy Index is comprised of: 70.0% MSCI AC World Index and 30.0% Bloomberg U.S. Aggregate Index.

City of Grosse Pointe Woods Employees Retirement System

iShares S&P 500 Index

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Inception Date
iShares S&P 500 Index	**7.5%**	**10.0%**	**-7.8%**	**18.6%**	**11.2%**	**12.4%**	**12.2%**	**9.2%**	*1/05*
S&P 500 Index	7.5	10.0	-7.7	18.6	11.2	12.4	12.2	9.3	
S&P 500 Equal Weighted Index	2.4	7.8	-8.1	19.8	7.8	9.1	9.3	7.8	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
iShares S&P 500 Index	**1.00**	**0.0%**	**1.00**	**21.0%**	**0.0%**	**-1.6**
S&P 500 Index	1.00	0.0	1.00	21.0	0.0	--
S&P 500 Equal Weighted Index	1.06	-3.9	0.93	22.5	5.6	0.6

Portfolio Statistics	Trailing P/E	Trailing P/B	Wtd Avg Mkt Cap	Current Yield	Equity Annual Turnover
iShares S&P 500 Index	**20.9**	**3.8**	**542,518.0M**	**1.6%**	**--%**
S&P 500 Index	20.9	3.8	542,518.0	1.6	--
S&P 500 Equal Weighted Index	--	--	--	--	--

* Risk Statistics are based on monthly data.

* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

iShares S&P 500 Index

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = 0.0%	No
Beta < 1.20	Beta = 1.00	Yes
Alpha > 0.0%	Alpha = 0.0%	No
Peer Group Rank > 50th Percentile	Ranks in Top 33rd Percentile	Yes

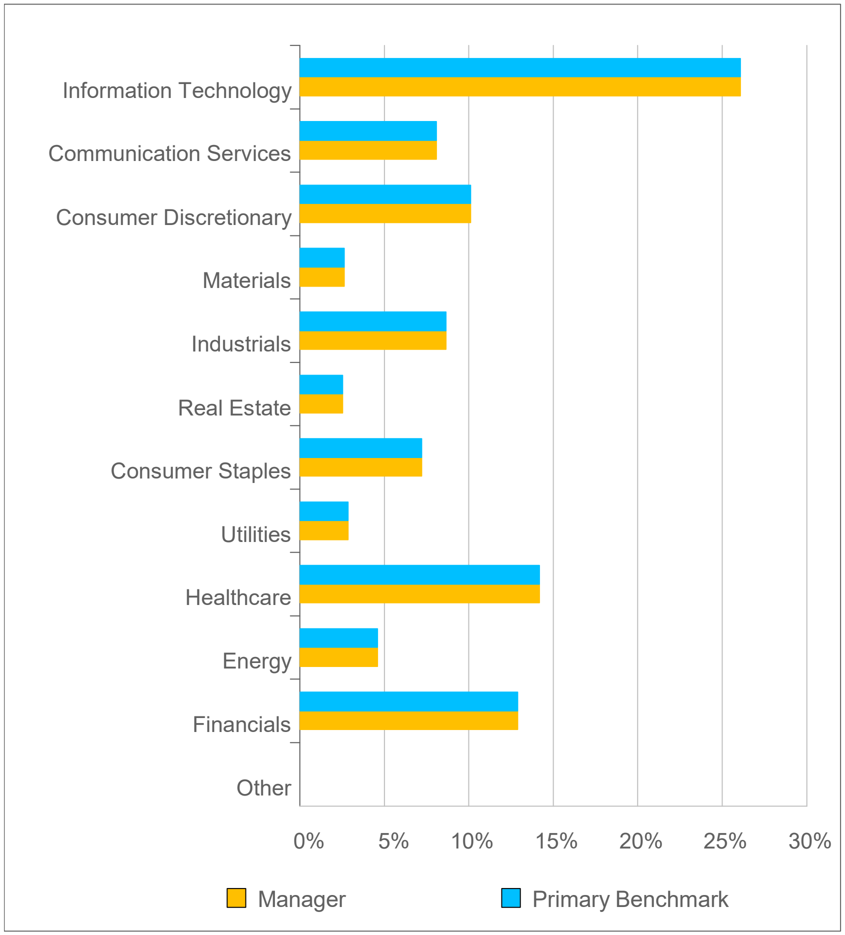
City of Grosse Pointe Woods Employees Retirement System

iShares S&P 500 Index

Equity Sector

Report For Periods Ending March 31, 2023

Sector Allocation



	Sector Weightings		Market Total Returns	
Sector	**Manager**	**Primary Benchmark**	**3 Months**	**12 Months**
Information Technology	26%	26%	21.8%	-4.2%
Communication Services	8	8	20.5	-18.4
Consumer Discretionary	10	10	16.1	-20.0
Materials	3	3	4.3	-6.3
Industrials	9	9	3.5	-0.3
Real Estate	3	3	2.0	-19.7
Consumer Staples	7	7	0.8	0.2
Utilities	3	3	-3.2	-6.2
Healthcare	14	14	-4.3	-3.7
Energy	5	5	-4.7	13.6
Financials	13	13	-5.6	-12.5
Other	0	0	-	-

Top Five Holdings	**Weighting**
Apple Inc.	7.1%
Microsoft Corporation	6.3
Amazon.com, Inc.	2.7
NVIDIA Corporation	2.0
Alphabet Inc. Class A	1.8

Number of Holdings: 503

* Sector weightings may not add up to 100% due to rounding.

* Manager data represents the most current available at the time of report publication.

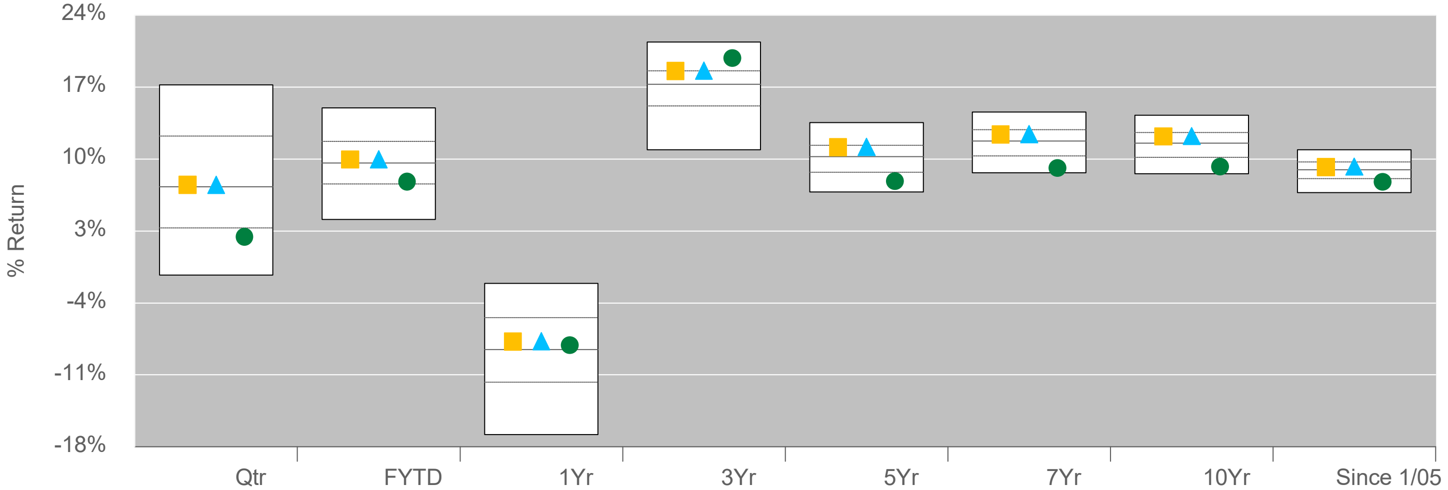
* Effective fourth quarter 2018, Telecommunication Services was replaced by Communication Services by the Global Industry Classification Standard (GICS). Some members of Consumer Discretionary, Technology, and Telecommunication Services were reclassified as Communication Services.

City of Grosse Pointe Woods Employees Retirement System

iShares S&P 500 Index

Broad Large Cap Universe

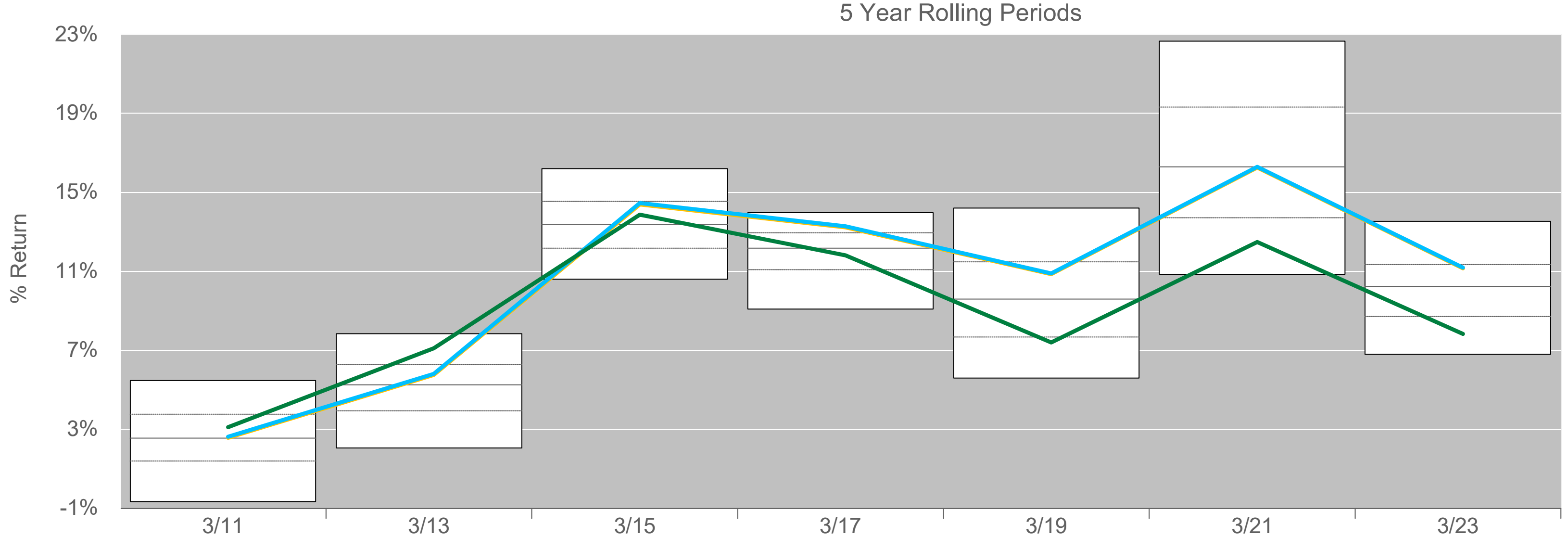
For Report Periods Ending March 31, 2023



	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since 1/05
5th	17.2%	15.0%	-2.1%	21.4%	13.5%	14.6%	14.3%	10.9%
25th	12.2	11.7	-5.4	18.6	11.3	12.9	12.6	9.7
50th	7.3	9.6	-8.5	17.3	10.2	11.8	11.5	9.0
75th	3.3	7.6	-11.7	15.2	8.7	10.3	10.2	8.1
95th	-1.3	4.1	-16.8	10.9	6.8	8.7	8.5	6.7
■	7.5%	10.0%	-7.8%	18.6%	11.2%	12.4%	12.2%	9.2%
▲	7.5	10.0	-7.7	18.6	11.2	12.4	12.2	9.3
●	2.4	7.8	-8.1	19.8	7.8	9.1	9.3	7.8

Report From March 31, 2006 to March 31, 2023

5 Year Rolling Periods



City of Grosse Pointe Woods Employees Retirement System

iShares Russell Midcap Index

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Inception Date
iShares Russell Midcap Index	**4.0%**	**9.6%**	**-8.9%**	**19.0%**	**7.9%**	**9.7%**	**9.9%**	**9.0%**	*1/05*
Russell Midcap Index	4.1	9.7	-8.8	19.2	8.1	9.9	10.1	9.2	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
iShares Russell Midcap Index	**1.00**	**-0.1%**	**1.00**	**23.3%**	**0.1%**	**-2.5**
Russell Midcap Index	1.00	0.0	1.00	23.4	0.0	--

Portfolio Statistics	Trailing P/E	Trailing P/B	Wtd Avg Mkt Cap	Current Yield	Equity Annual Turnover
iShares Russell Midcap Index	**17.0**	**2.7**	**22,486.0M**	**1.6%**	**--%**
Russell Midcap Index	17.0	2.7	22,486.0	1.6	--

* Risk Statistics are based on monthly data.

* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

iShares Russell Midcap Index

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = -0.2%	No
Beta < 1.20	Beta = 1.00	Yes
Alpha > 0.0%	Alpha = -0.1%	No
Peer Group Rank > 50th Percentile	Ranks in Top 50th Percentile	Yes

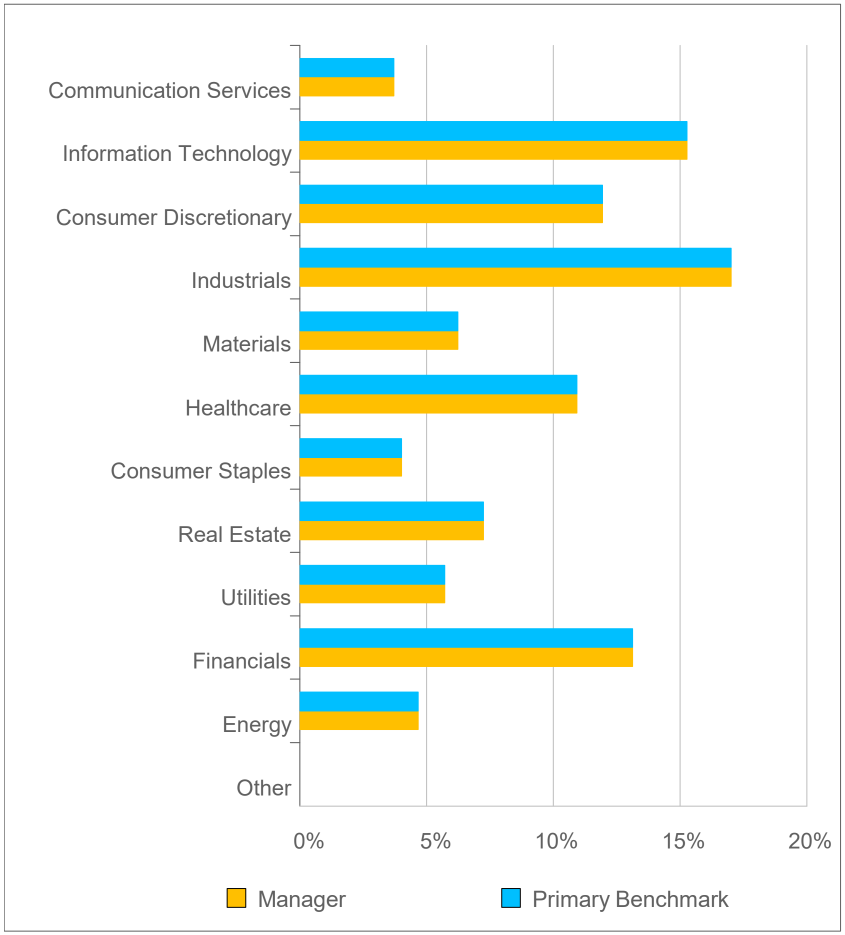
City of Grosse Pointe Woods Employees Retirement System

iShares Russell Midcap Index

Equity Sector

Report For Periods Ending March 31, 2023

Sector Allocation



	Sector Weightings		Market Total Returns	
Sector	Manager	Primary Benchmark	3 Months	12 Months
Communication Services	4%	4%	15.4%	-28.3%
Information Technology	15	15	14.4	-10.5
Consumer Discretionary	12	12	8.2	-5.5
Industrials	17	17	7.7	1.2
Materials	6	6	4.1	-8.8
Healthcare	11	11	3.4	-7.1
Consumer Staples	4	4	3.3	-3.5
Real Estate	7	7	0.4	-20.8
Utilities	6	6	-1.7	-2.7
Financials	13	13	-5.6	-15.2
Energy	5	5	-7.9	1.6
Other	0	0	-	-

Top Five Holdings	Weighting
Synopsys, Inc.	0.6%
Cadence Design Systems, Inc.	0.6
O'Reilly Automotive, Inc.	0.6
Amphenol Corporation Class A	0.5
Phillips 66	0.5

Number of Holdings: 814

* Sector weightings may not add up to 100% due to rounding.

* Manager data represents the most current available at the time of report publication.

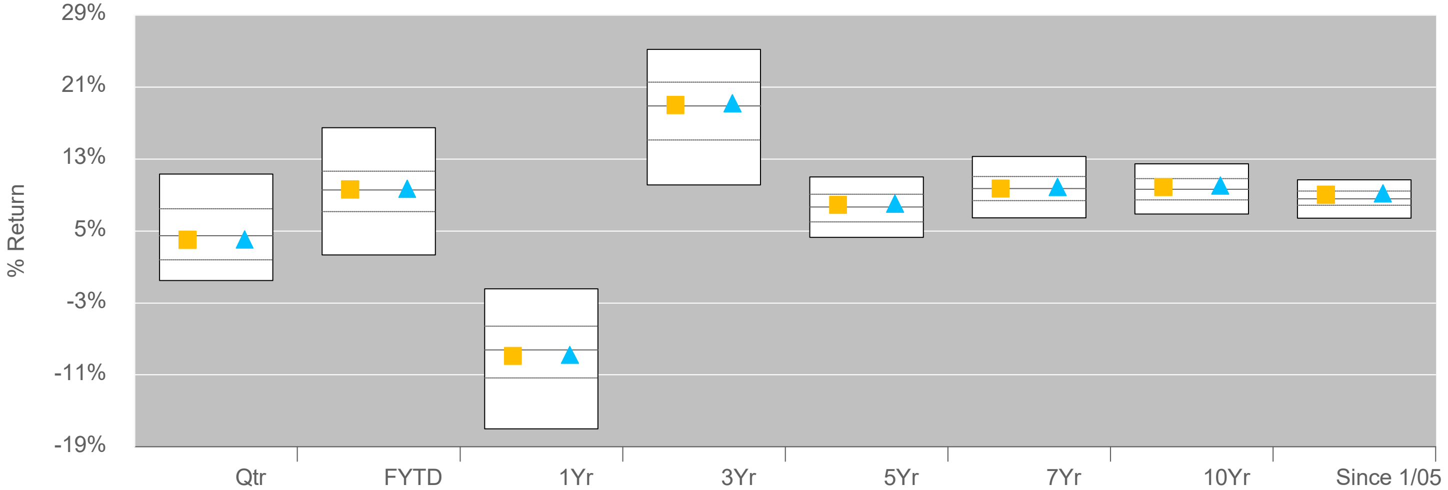
* Effective fourth quarter 2018, Telecommunication Services was replaced by Communication Services by the Global Industry Classification Standard (GICS). Some members of Consumer Discretionary, Technology, and Telecommunication Services were reclassified as Communication Services.

City of Grosse Pointe Woods Employees Retirement System

iShares Russell Midcap Index

Broad Mid Cap Universe

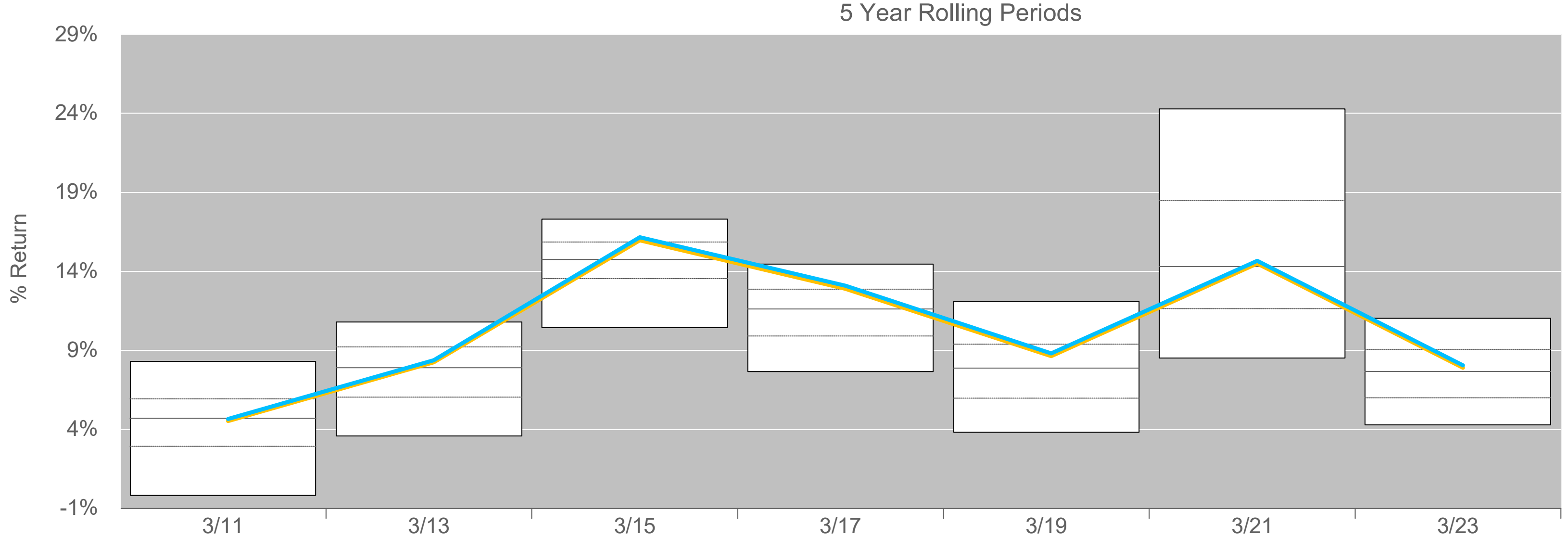
For Report Periods Ending March 31, 2023



	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since 1/05
5th	11.3%	16.5%	-1.4%	25.2%	11.0%	13.3%	12.5%	10.7%
25th	7.5	11.6	-5.6	21.6	9.1	11.1	10.8	9.5
50th	4.5	9.5	-8.2	18.9	7.7	9.7	9.6	8.6
75th	1.8	7.2	-11.3	15.1	6.0	8.4	8.5	7.8
95th	-0.5	2.3	-17.0	10.1	4.3	6.5	6.9	6.4
■	4.0%	9.6%	-8.9%	19.0%	7.9%	9.7%	9.9%	9.0%
▲	4.1	9.7	-8.8	19.2	8.1	9.9	10.1	9.2

Report From March 31, 2006 to March 31, 2023

5 Year Rolling Periods



City of Grosse Pointe Woods Employees Retirement System

Vanguard S&P Small Cap 600 Index

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Inception Date
Vanguard S&P Small Cap 600 Index	**2.5%**	**6.1%**	**-8.9%**	**21.6%**	**6.2%**	**9.6%**	**9.8%**	**11.4%**	*9/10*
S&P SmallCap 600 Index	2.6	6.2	-8.8	21.7	6.3	9.6	9.9	11.5	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
Vanguard S&P Small Cap 600 Index	**1.00**	**-0.1%**	**1.00**	**26.4%**	**0.1%**	**-1.0**
S&P SmallCap 600 Index	1.00	0.0	1.00	26.4	0.0	--

Portfolio Statistics	Trailing P/E	Trailing P/B	Wtd Avg Mkt Cap	Current Yield	Equity Annual Turnover
Vanguard S&P Small Cap 600 Index	**12.1**	**1.6**	**2,334.0M**	**1.8%**	**--%**
S&P SmallCap 600 Index	12.1	1.6	2,334.0	1.8	--

* Risk Statistics are based on monthly data.

* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Vanguard S&P Small Cap 600 Index

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = -0.1%	No
Beta < 1.20	Beta = 1.00	Yes
Alpha > 0.0%	Alpha = -0.1%	No
Peer Group Rank > 50th Percentile	Ranks in Top 50th Percentile	Yes

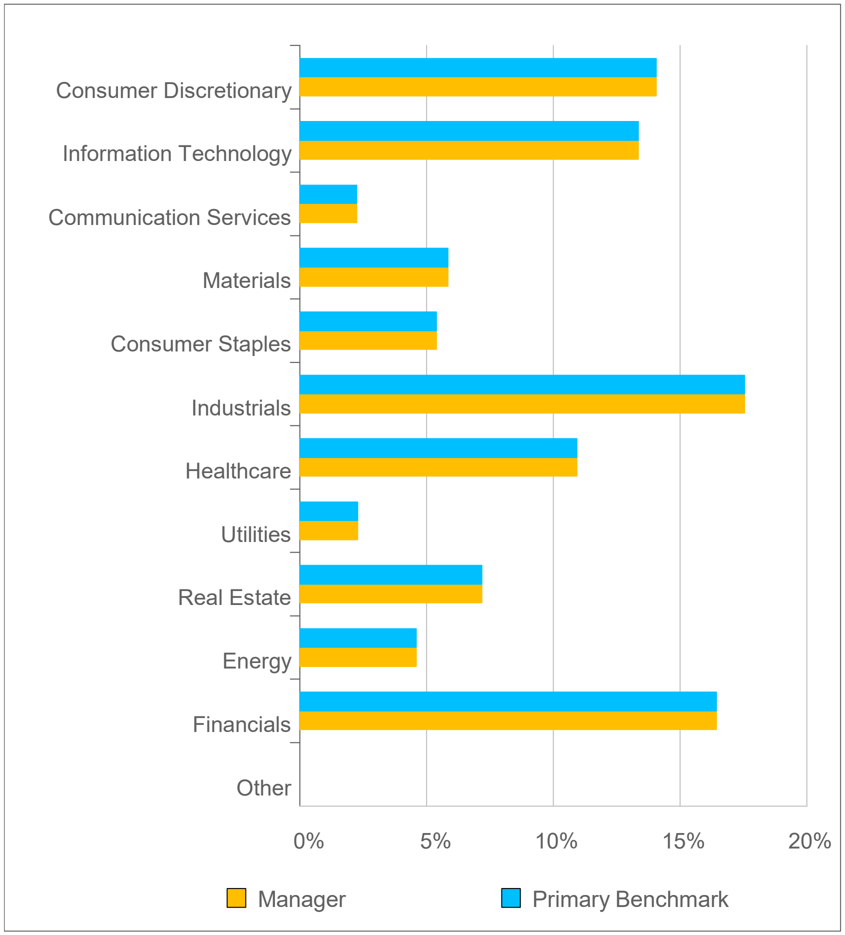
City of Grosse Pointe Woods Employees Retirement System

Vanguard S&P Small Cap 600 Index

Equity Sector

Report For Periods Ending March 31, 2023

Sector Allocation



	Sector Weightings		Market Total Returns	
Sector	Manager	Primary Benchmark	3 Months	12 Months
Consumer Discretionary	14%	14%	11.9%	-2.7%
Information Technology	13	13	11.3	-3.6
Communication Services	2	2	11.1	-19.5
Materials	6	6	9.0	1.9
Consumer Staples	5	5	8.5	11.0
Industrials	18	18	7.6	3.6
Healthcare	11	11	-0.5	-18.6
Utilities	2	2	-0.9	-1.8
Real Estate	7	7	-3.7	-29.6
Energy	5	5	-8.5	-5.4
Financials	16	16	-11.2	-19.8
Other	0	0	-	-

Top Five Holdings	Weighting
Rambus Inc.	0.6%
SPS Commerce, Inc.	0.6
Applied Industrial Technologies, Inc.	0.6
Ensign Group, Inc.	0.6
Comfort Systems USA, Inc.	0.6

Number of Holdings: 602

* Sector weightings may not add up to 100% due to rounding.

* Manager data represents the most current available at the time of report publication.

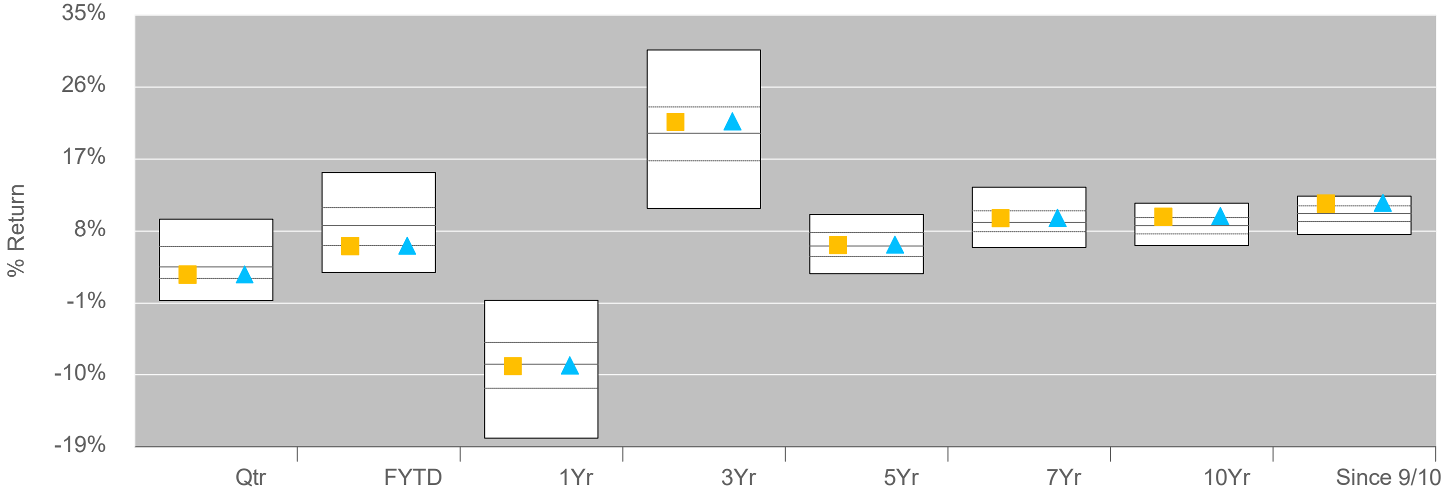
* Effective fourth quarter 2018, Telecommunication Services was replaced by Communication Services by the Global Industry Classification Standard (GICS). Some members of Consumer Discretionary, Technology, and Telecommunication Services were reclassified as Communication Services.

City of Grosse Pointe Woods Employees Retirement System

Vanguard S&P Small Cap 600 Index

Broad Small Cap Universe

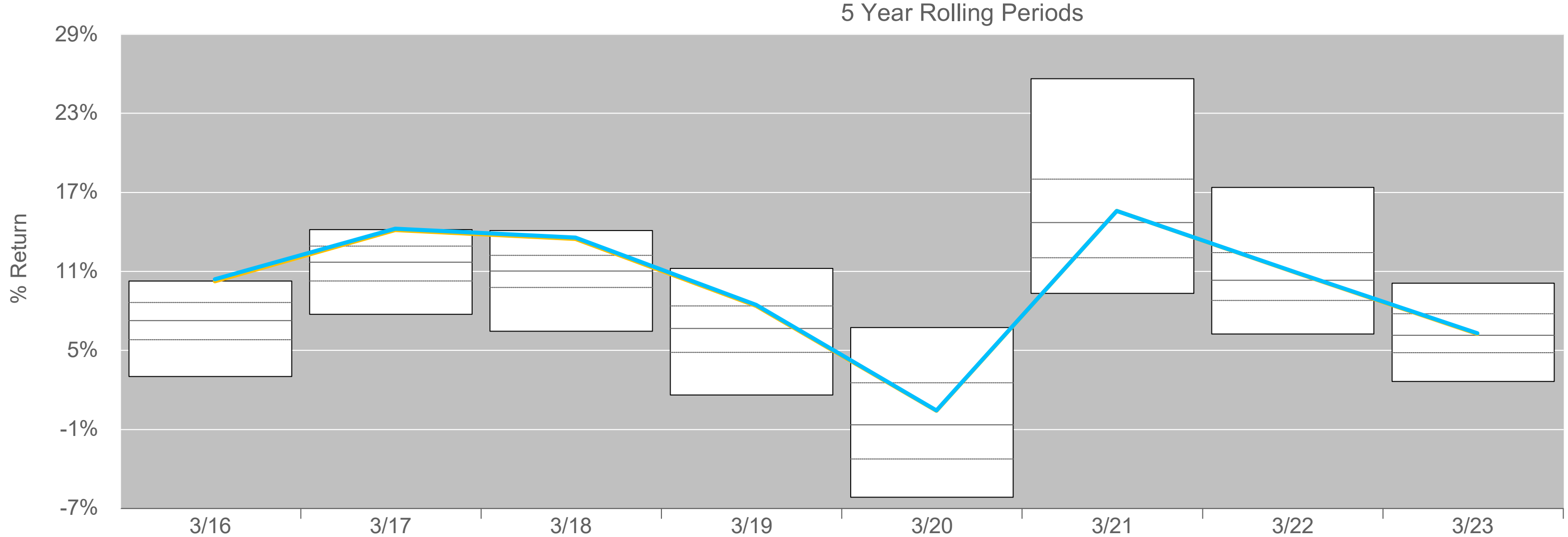
For Report Periods Ending March 31, 2023



	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since 9/10
5th	9.5%	15.3%	-0.6%	30.6%	10.1%	13.5%	11.5%	12.4%
25th	6.1	10.9	-5.9	23.5	7.8	10.5	9.7	11.1
50th	3.5	8.7	-8.7	20.2	6.1	9.1	8.7	10.2
75th	2.1	6.2	-11.7	16.7	4.8	7.9	7.6	9.2
95th	-0.8	2.8	-17.9	10.8	2.6	5.9	6.2	7.5
■	2.5%	6.1%	-8.9%	21.6%	6.2%	9.6%	9.8%	11.4%
▲	2.6	6.2	-8.8	21.7	6.3	9.6	9.9	11.5

Report From March 31, 2011 to March 31, 2023

5 Year Rolling Periods



City of Grosse Pointe Woods Employees Retirement System

EuroPacific Growth Fund

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Inception Date
EuroPacific Growth Fund	**9.9%**	**13.3%**	**-3.4%**	**12.0%**	**3.1%**	**6.9%**	**5.9%**	**5.1%**	*8/08*
MSCI AC World Index ex-U.S.	6.9	10.0	-5.1	11.8	2.5	5.9	4.2	3.4	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
EuroPacific Growth Fund	**1.07**	**0.6%**	**0.95**	**20.1%**	**4.5%**	**0.1**
MSCI AC World Index ex-U.S.	1.00	0.0	1.00	18.1	0.0	--

Portfolio Statistics	Trailing P/E	Trailing P/B	Wtd Avg Mkt Cap	Current Yield	Equity Annual Turnover
EuroPacific Growth Fund	**16.9**	**2.8**	**95,332.0M**	**2.0%**	**29.0%**
MSCI AC World Index ex-U.S.	12.9	1.7	88,392.0	3.2	--

* Risk Statistics are based on monthly data. MSCI does not compute the Weighted Average Market Capitalization - the average market capitalization is used as the best available representation.

* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

EuroPacific Growth Fund

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = 0.6%	Yes
Beta < 1.20	Beta = 1.07	Yes
Alpha > 0.0%	Alpha = 0.6%	Yes
Peer Group Rank > 50th Percentile	Ranks in Top 50th Percentile	Yes

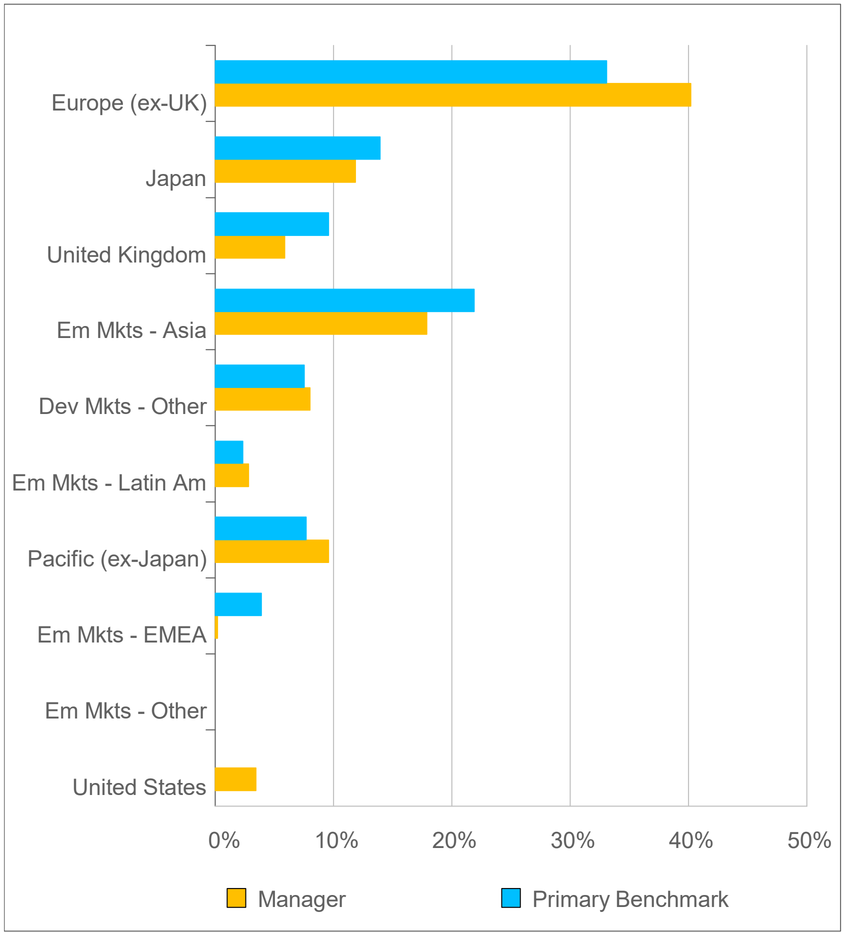
City of Grosse Pointe Woods Employees Retirement System

EuroPacific Growth Fund

International Sector

Report For Periods Ending March 31, 2023

Region Allocation



	Region Weightings		Market Total Returns	
Region	Manager	Primary Benchmark	3 Months	12 Months
Europe (ex-UK)	40%	33%	12.2%	2.8%
Japan	12	14	6.4	-4.9
United Kingdom	6	10	6.1	-0.8
Em Mkts - Asia	18	22	4.9	-8.9
Dev Mkts - Other	8	8	4.5	-12.3
Em Mkts - Latin Am	3	2	4.0	-10.5
Pacific (ex-Japan)	10	8	2.2	-6.1
Em Mkts - EMEA	0	4	-0.8	-17.8
Em Mkts - Other	0	0	-	-
United States	3	0	-	-

Top Five Countries	Weighting
France	12.3%
Japan	11.9
India	8.4
Canada	7.6
United Kingdom	5.6

Number of Holdings: 339

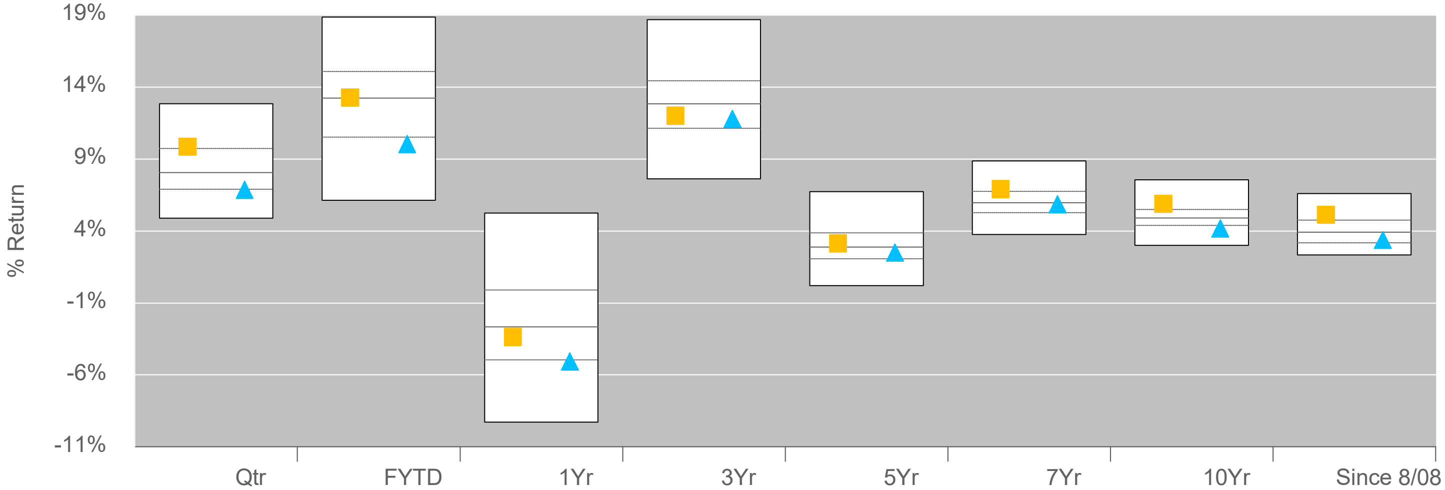
* Sector weightings may not add up to 100% due to rounding.
* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

EuroPacific Growth Fund

International Equity Universe

For Report Periods Ending March 31, 2023



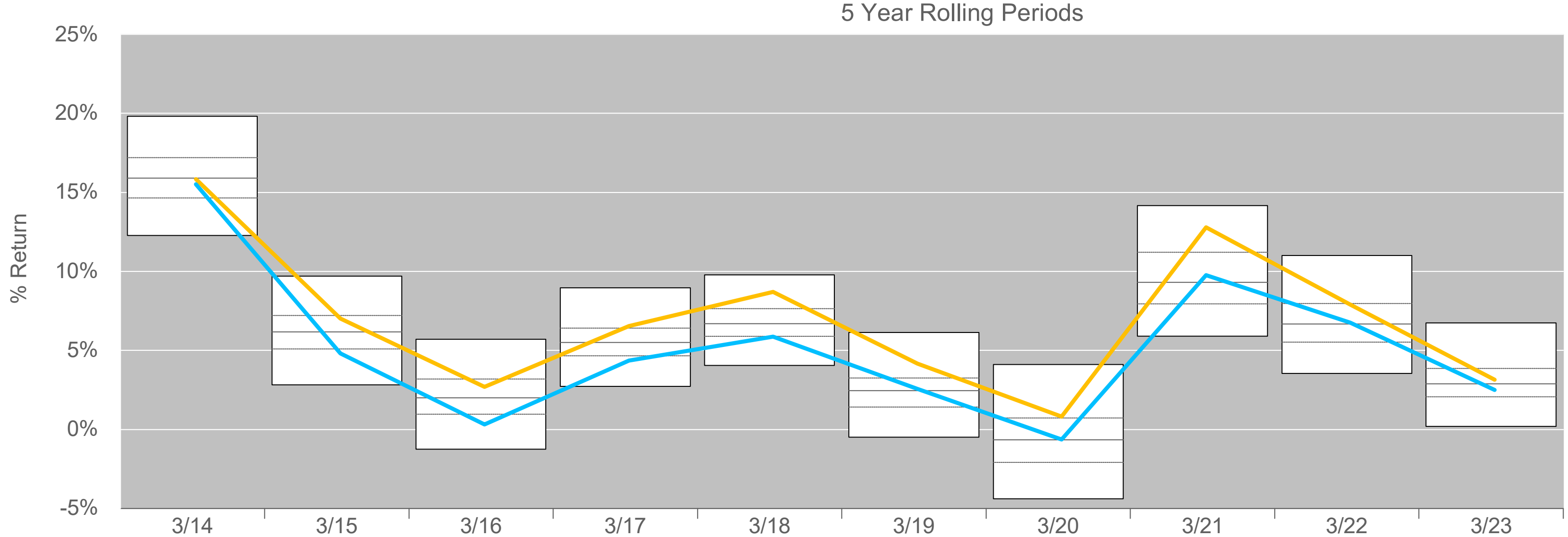
■ - EuroPacific Growth Fund

▲ - MSCI AC World Index ex-U.S.

	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since 8/08
5th	12.9%	18.9%	5.3%	18.7%	6.8%	8.9%	7.6%	6.6%
25th	9.7	15.1	-0.1	14.4	3.9	6.8	5.5	4.8
50th	8.1	13.2	-2.7	12.8	2.9	6.0	4.9	3.9
75th	6.9	10.5	-5.0	11.1	2.1	5.3	4.4	3.2
95th	4.9	6.1	-9.3	7.6	0.2	3.8	3.0	2.3
■	9.9%	13.3%	-3.4%	12.0%	3.1%	6.9%	5.9%	5.1%
▲	6.9	10.0	-5.1	11.8	2.5	5.9	4.2	3.4

Report From March 31, 2009 to March 31, 2023

5 Year Rolling Periods



City of Grosse Pointe Woods Employees Retirement System

Templeton Inst'l Foreign Smaller Co.

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Inception Date
Templeton Inst'l Foreign Smaller Co.	**7.7%**	**8.8%**	**-5.4%**	**13.5%**	**-0.3%**	**4.3%**	**4.1%**	**6.4%**	*1/05*
MSCI Small Cap EAFE Index	4.9	9.5	-9.8	12.1	0.9	5.3	5.8	5.7	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
Templeton Inst'l Foreign Smaller Co.	**1.01**	**-1.3%**	**0.93**	**21.1%**	**5.3%**	**-0.2**
MSCI Small Cap EAFE Index	1.00	0.0	1.00	20.4	0.0	--

Portfolio Statistics	Trailing P/E	Trailing P/B	Wtd Avg Mkt Cap	Current Yield	Equity Annual Turnover
Templeton Inst'l Foreign Smaller Co.	**13.0**	**1.6**	**1,983.1 M**	**3.0%**	**31.1%**
MSCI Small Cap EAFE Index	10.9	1.2	2,651.0	3.1	--

* Risk Statistics are based on monthly data. MSCI does not compute the Weighted Average Market Capitalization - the average market capitalization is used as the best available representation.
* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Templeton Inst'l Foreign Smaller Co.

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = -1.3%	No
Beta < 1.20	Beta = 1.01	Yes
Alpha > 0.0%	Alpha = -1.3%	No
Peer Group Rank > 50th Percentile	Ranks in Bottom 25th Percentile	No

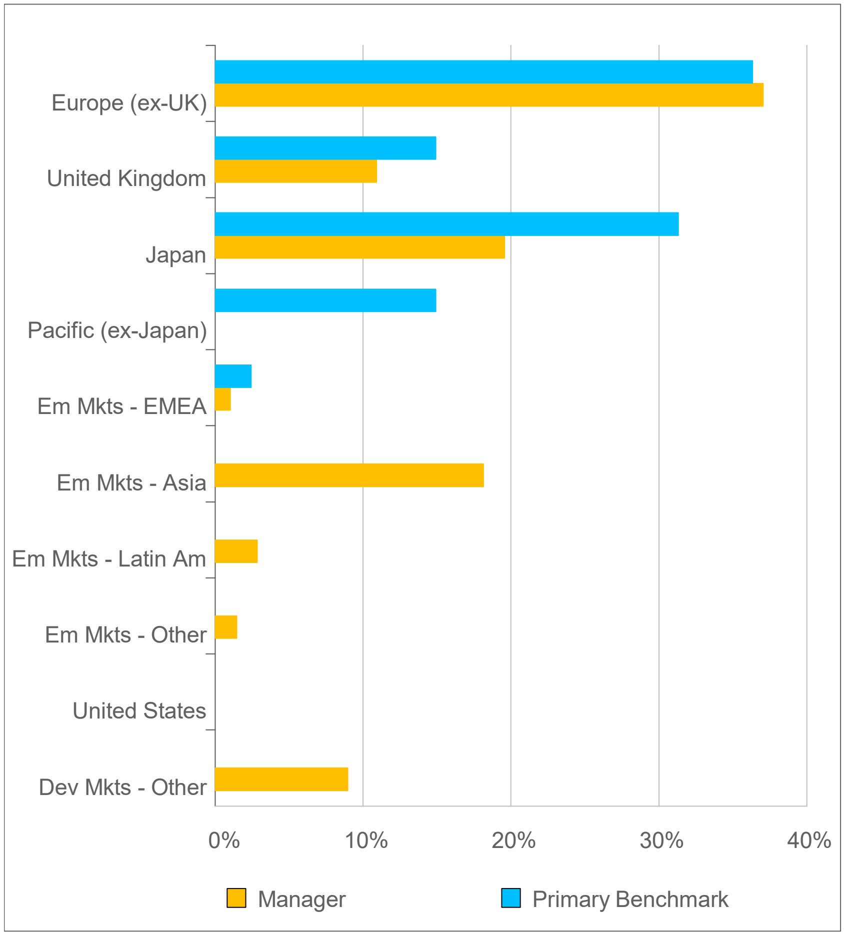
City of Grosse Pointe Woods Employees Retirement System

Templeton Inst'l Foreign Smaller Co.

International Sector

Report For Periods Ending March 31, 2023

Region Allocation



	Region Weightings		Market Total Returns	
Region	Manager	Primary Benchmark	3 Months	12 Months
Europe (ex-UK)	37%	36%	9.3%	-8.4%
United Kingdom	11	15	4.7	-15.7
Japan	20	31	4.2	-1.1
Pacific (ex-Japan)	0	15	0.1	-14.7
Em Mkts - EMEA	1	2	-8.2	-32.7
Em Mkts - Asia	18	0	-	-
Em Mkts - Latin Am	3	0	-	-
Em Mkts - Other	1	0	-	-
United States	0	0	-	-18.0
Dev Mkts - Other	9	0	-	-

Top Five Countries	Weighting
Japan	19.6%
United Kingdom	10.9
Italy	9.7
Taiwan	8.4
Germany	7.6

Number of Holdings: 105

* Sector weightings may not add up to 100% due to rounding.

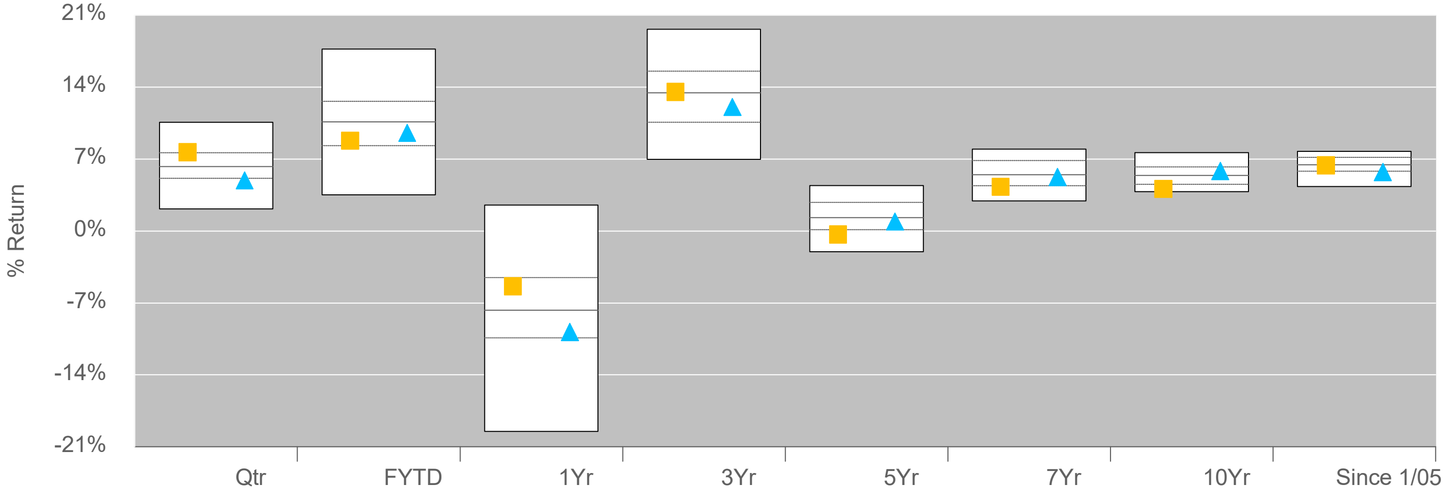
* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Templeton Inst'l Foreign Smaller Co.

International Small Cap Universe

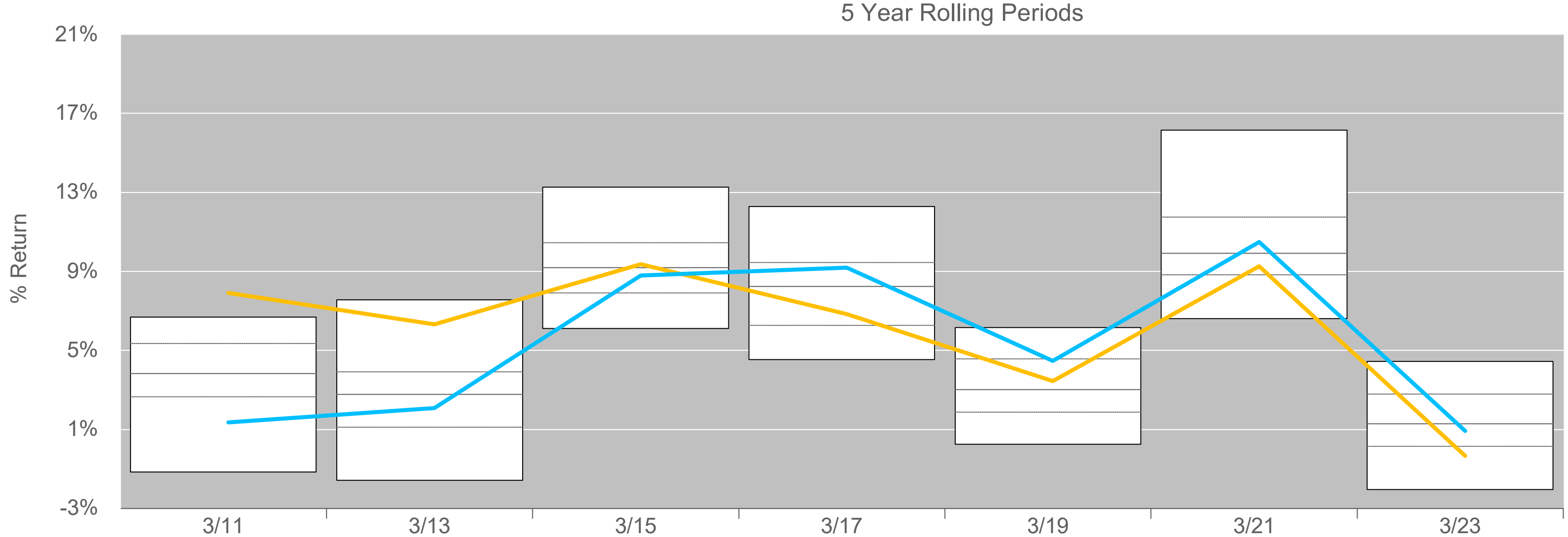
For Report Periods Ending March 31, 2023



■ - Templeton Inst'l Foreign Smaller Co.
▲ - MSCI Small Cap EAFE Index

	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since 1/05
5th	10.6%	17.7%	2.5%	19.7%	4.4%	8.0%	7.6%	7.8%
25th	7.6	12.6	-4.5	15.5	2.8	6.8	6.2	7.2
50th	6.3	10.6	-7.7	13.5	1.3	5.5	5.4	6.5
75th	5.1	8.3	-10.4	10.6	0.1	4.4	4.5	5.8
95th	2.1	3.5	-19.5	7.0	-2.0	2.9	3.8	4.3
■	7.7%	8.8%	-5.4%	13.5%	-0.3%	4.3%	4.1%	6.4%
▲	4.9	9.5	-9.8	12.1	0.9	5.3	5.8	5.7

Report From March 31, 2006 to March 31, 2023
5 Year Rolling Periods



City of Grosse Pointe Woods Employees Retirement System

Brown International Small Company

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	Since Inception	Inception Date
Brown International Small Company	**6.5%**	**10.7%**	**-9.3%**	**13.1%**	**5.8%**	**11.6%**	**11.2%**	*9/15*
MSCI Small Cap EAFE Index	4.9	9.5	-9.8	12.1	0.9	5.3	5.7	
MSCI ACWI ex-U.S. Small Cap Index	4.7	8.7	-10.4	15.0	1.7	5.7	6.1	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
Brown International Small Company	**0.95**	**4.8%**	**0.78**	**23.1%**	**10.0%**	**0.5**
MSCI Small Cap EAFE Index	1.00	0.0	1.00	20.4	0.0	--
MSCI ACWI ex-U.S. Small Cap Index	0.99	0.8	0.98	20.6	10.6	0.4

Portfolio Statistics	Trailing P/E	Trailing P/B	Wtd Avg Mkt Cap	Current Yield	Equity Annual Turnover
Brown International Small Company	**47.7**	**8.5**	**4,111.6M**	**1.1%**	**10.8%**
MSCI Small Cap EAFE Index	10.9	1.2	2,651.0	3.1	--
MSCI ACWI ex-U.S. Small Cap Index	10.9	1.3	2,384.0	3.1	--

Asset Growth Summary (in thousands)	
Beginning Market Value	$ 0
Net Contributions/(Distributions)	$ 0
Market Appreciation/(Depreciation)	**$ 0**
Ending Market Value	**$ 0**

* Risk Statistics are based on monthly data. MSCI does not compute the Weighted Average Market Capitalization - the average market capitalization is used as the best available representation.

* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Brown International Small Company

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = 4.9%	Yes
Beta < 1.20	Beta = 0.95	Yes
Alpha > 0.0%	Alpha = 4.8%	Yes
Peer Group Rank > 50th Percentile	Ranks in Top 5th Percentile	Yes

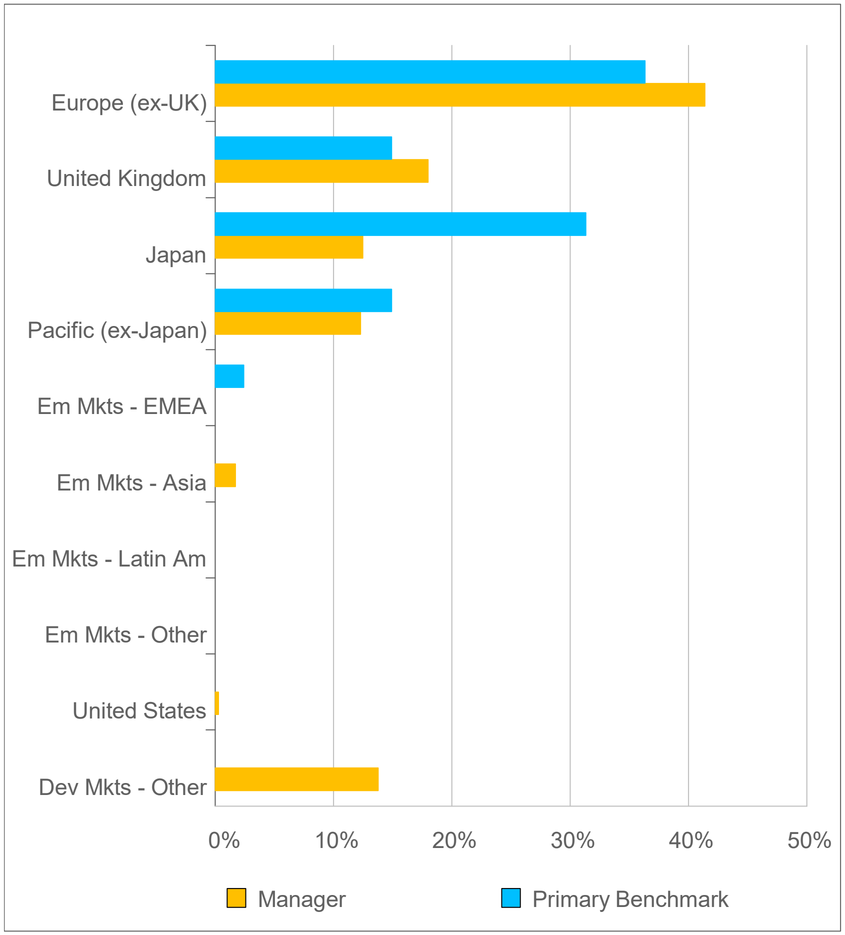
City of Grosse Pointe Woods Employees Retirement System

Brown International Small Company

International Sector

Report For Periods Ending March 31, 2023

Region Allocation



Region	Region Weightings: Manager	Region Weightings: Primary Benchmark	Market Total Returns: 3 Months	Market Total Returns: 12 Months
Europe (ex-UK)	41%	36%	9.3%	-8.4%
United Kingdom	18	15	4.7	-15.7
Japan	13	31	4.2	-1.1
Pacific (ex-Japan)	12	15	0.1	-14.7
Em Mkts - EMEA	0	2	-8.2	-32.7
Em Mkts - Asia	2	0	-	-
Em Mkts - Latin Am	0	0	-	-
Em Mkts - Other	0	0	-	-
United States	0	0	-	-18.0
Dev Mkts - Other	14	0	-	-

Top Five Countries	Weighting
United Kingdom	18.0%
France	14.0
Japan	12.5
Germany	11.0
Canada	9.5

Number of Holdings: 41

* Sector weightings may not add up to 100% due to rounding.

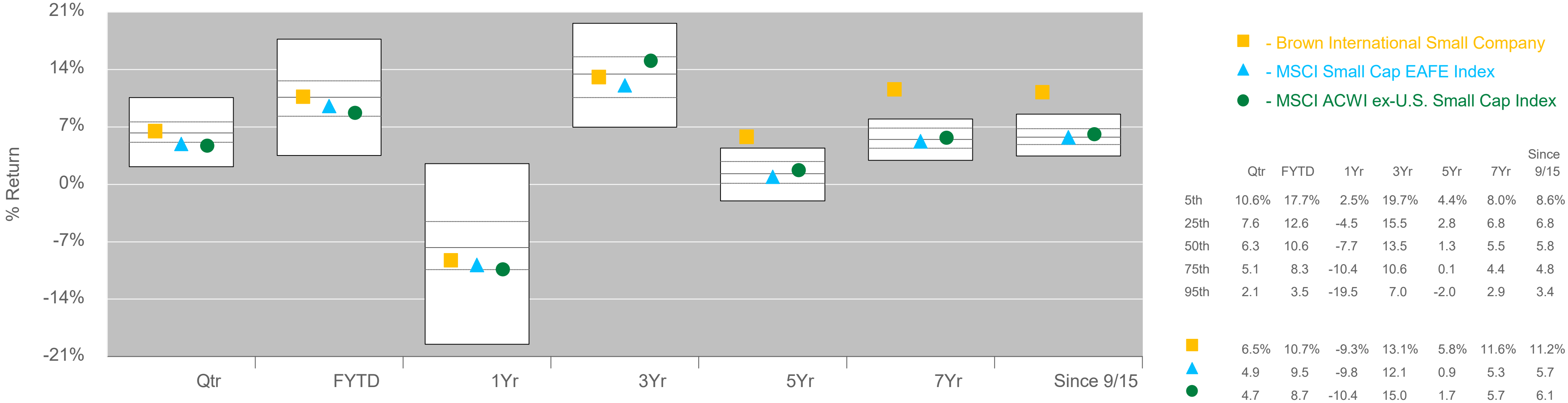
* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Brown International Small Company

International Small Cap Universe

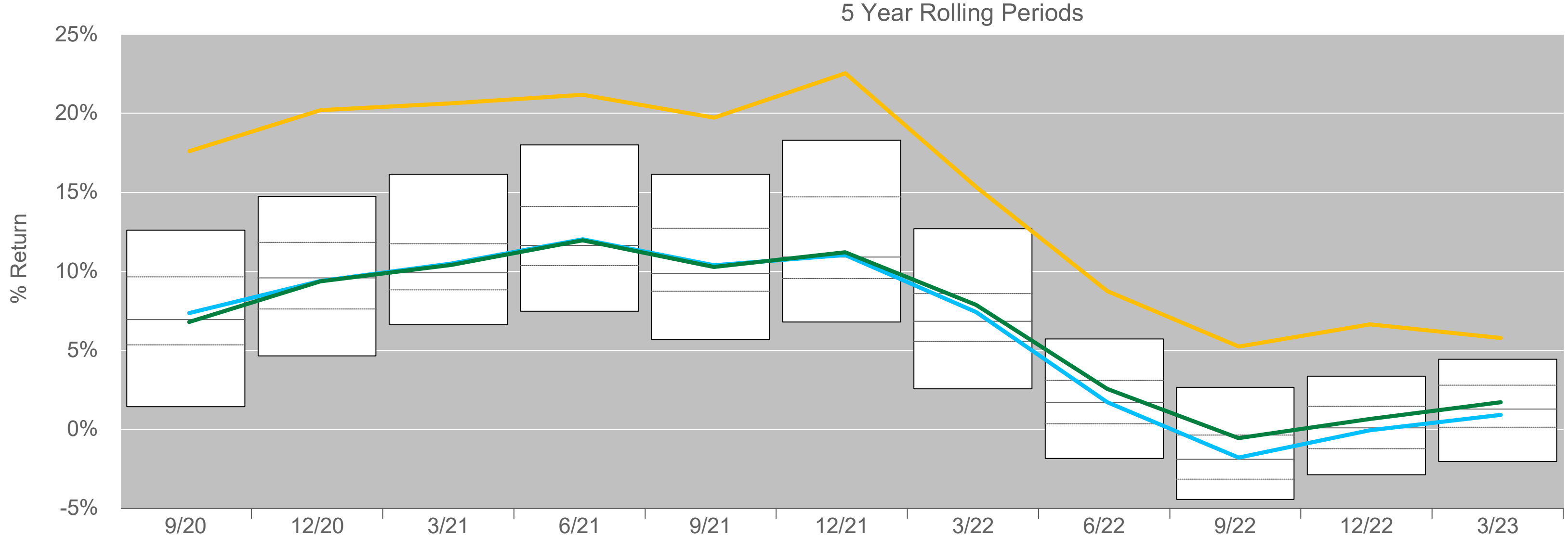
For Report Periods Ending March 31, 2023



	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	Since 9/15
5th	10.6%	17.7%	2.5%	19.7%	4.4%	8.0%	8.6%
25th	7.6	12.6	-4.5	15.5	2.8	6.8	6.8
50th	6.3	10.6	-7.7	13.5	1.3	5.5	5.8
75th	5.1	8.3	-10.4	10.6	0.1	4.4	4.8
95th	2.1	3.5	-19.5	7.0	-2.0	2.9	3.4
■	6.5%	10.7%	-9.3%	13.1%	5.8%	11.6%	11.2%
▲	4.9	9.5	-9.8	12.1	0.9	5.3	5.7
●	4.7	8.7	-10.4	15.0	1.7	5.7	6.1

Report From September 30, 2015 to March 31, 2023

5 Year Rolling Periods



City of Grosse Pointe Woods Employees Retirement System

Redwheel Global Emerging Equity Fund

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Inception Date
Redwheel Global Emerging Equity Fund	**4.0%**	**0.3%**	**-12.0%**	**12.3%**	**-1.4%**	**6.7%**	**5.6%**	**6.4%**	*7/12*
MSCI Emerging Markets Index	4.0	0.8	-10.7	7.8	-0.9	4.9	2.0	2.8	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
Redwheel Global Emerging Equity Fund	**1.23**	**0.0%**	**0.92**	**24.9%**	**8.0%**	**-0.1**
MSCI Emerging Markets Index	1.00	0.0	1.00	19.2	0.0	--

Portfolio Statistics	Trailing P/E	Trailing P/B	Wtd Avg Mkt Cap	Current Yield	Equity Annual Turnover
Redwheel Global Emerging Equity Fund	**14.1**	**2.1**	**119,543.0M**	**1.4%**	**111.8%**
MSCI Emerging Markets Index	11.1	1.8	108,811.0	3.3	--

* Risk Statistics are based on monthly data. MSCI does not compute the Weighted Average Market Capitalization - the average market capitalization is used as the best available representation.
* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Redwheel Global Emerging Equity Fund

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = -0.5%	No
Beta < 1.20	Beta = 1.23	No
Alpha > 0.0%	Alpha = 0.0%	Yes
Peer Group Rank > 50th Percentile	Ranks in Bottom 50th Percentile	No

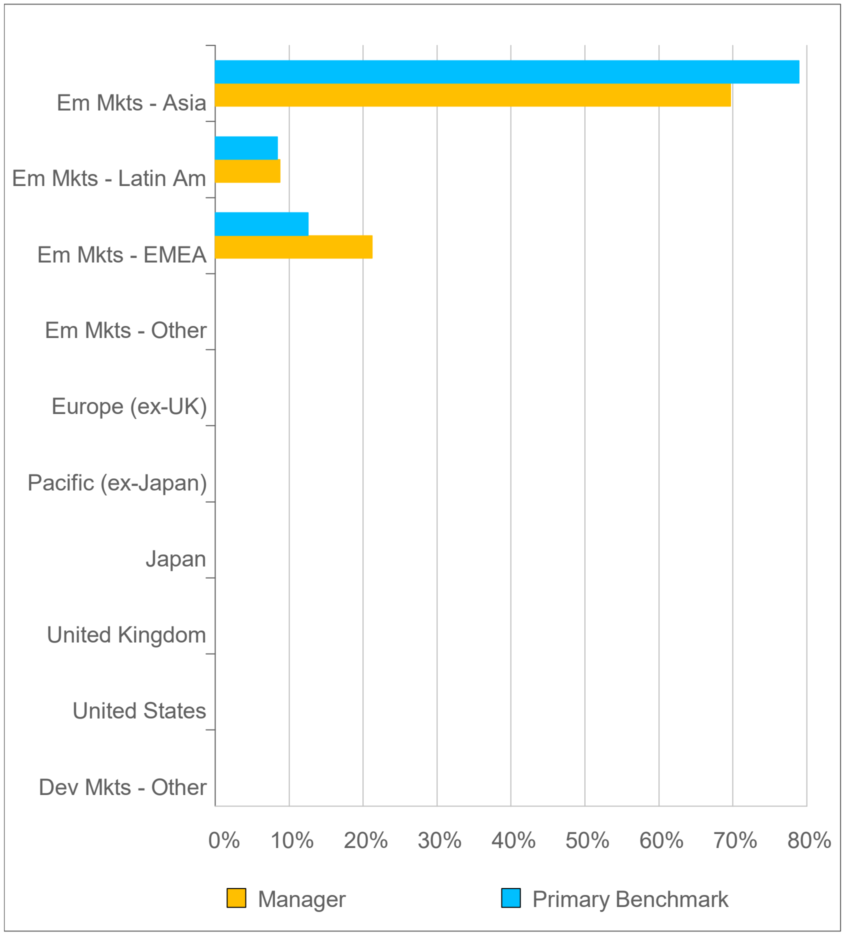
City of Grosse Pointe Woods Employees Retirement System

Redwheel Global Emerging Equity Fund

Emerging Markets Sector

Report For Periods Ending March 31, 2023

Region Allocation



	Region Weightings		Market Total Returns	
Region	Manager	Primary Benchmark	3 Months	12 Months
Em Mkts - Asia	70%	79%	4.9%	-8.9%
Em Mkts - Latin Am	9	8	4.0	-10.5
Em Mkts - EMEA	21	13	-1.0	-17.5
Em Mkts - Other	0	0	-	-
Europe (ex-UK)	0	0	-	-
Pacific (ex-Japan)	0	0	-	8.6
Japan	0	0	-	-
United Kingdom	0	0	-	-
United States	0	0	-	-
Dev Mkts - Other	0	0	-	-

Top Five Countries	Weighting
China	40.9%
India	10.3
Taiwan	7.7
Brazil	6.3
Zambia	5.9

Number of Holdings: 66

* Sector weightings may not add up to 100% due to rounding.

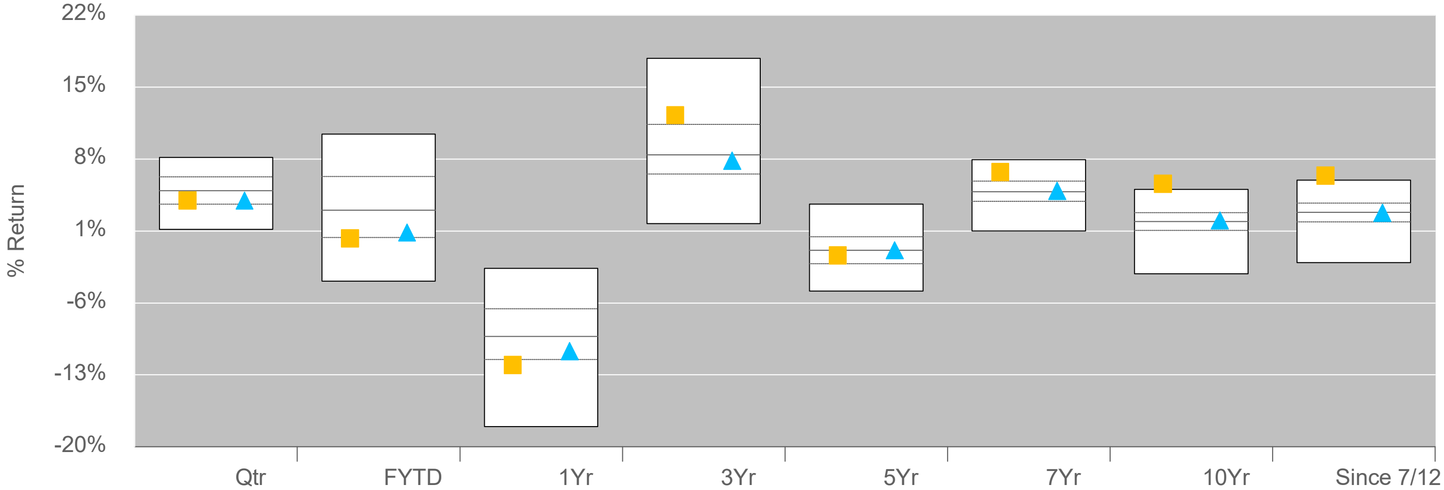
* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Redwheel Global Emerging Equity Fund

Emerging Markets Universe

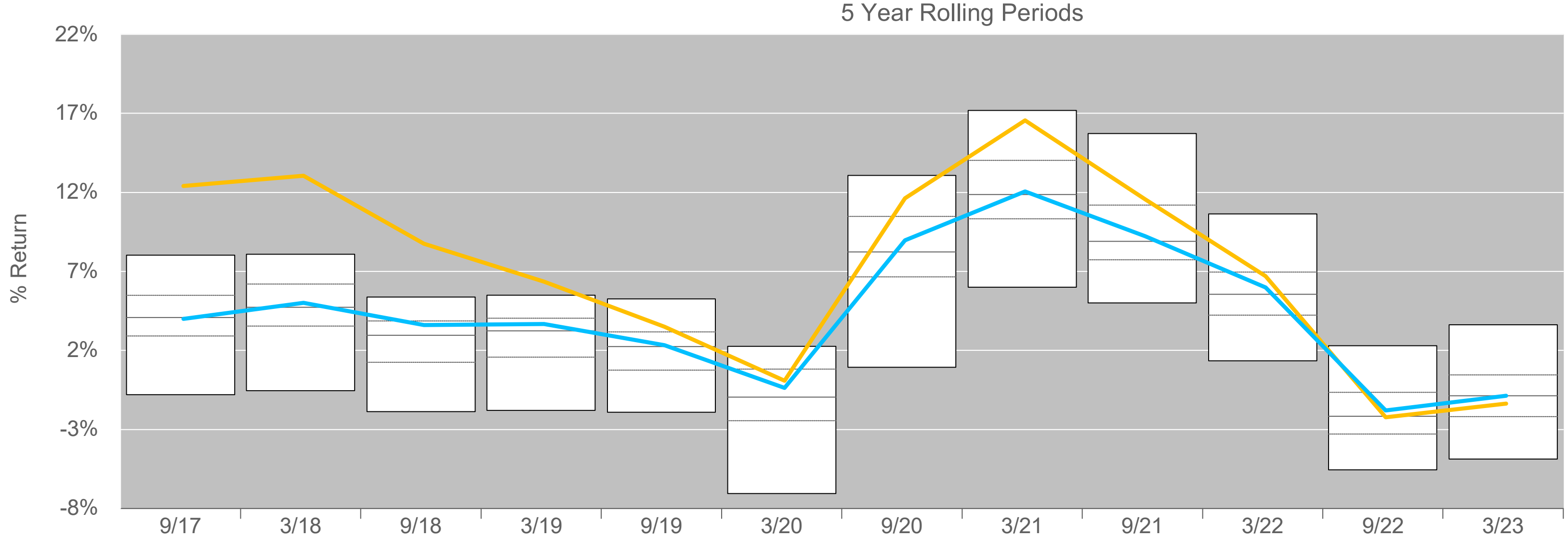
For Report Periods Ending March 31, 2023



■ - Redwheel Global Emerging Equity Fund
▲ - MSCI Emerging Markets Index

	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since 7/12
5th	8.2%	10.4%	-2.6%	17.8%	3.6%	8.0%	5.0%	5.9%
25th	6.3	6.3	-6.6	11.4	0.5	5.9	2.8	3.7
50th	4.9	3.0	-9.3	8.4	-0.9	4.8	1.9	2.8
75th	3.6	0.4	-11.5	6.5	-2.2	3.9	1.0	1.9
95th	1.1	-3.9	-18.0	1.7	-4.9	1.0	-3.2	-2.1
■	4.0%	0.3%	-12.0%	12.3%	-1.4%	6.7%	5.6%	6.4%
▲	4.0	0.8	-10.7	7.8	-0.9	4.9	2.0	2.8

Report From September 30, 2012 to March 31, 2023
5 Year Rolling Periods



City of Grosse Pointe Woods Employees Retirement System

DFA Emerging Markets Fund

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Inception Date
DFA Emerging Markets Fund	**5.3%**	**2.5%**	**-9.1%**	**11.9%**	**0.1%**	**5.5%**	**2.5%**	**6.2%**	*1/05*
MSCI Emerging Markets Index	4.0	0.8	-10.7	7.8	-0.9	4.9	2.0	5.9	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
DFA Emerging Markets Fund	**1.00**	**1.0%**	**0.97**	**19.8%**	**3.3%**	**0.3**
MSCI Emerging Markets Index	1.00	0.0	1.00	19.2	0.0	--

Portfolio Statistics	Trailing P/E	Trailing P/B	Wtd Avg Mkt Cap	Current Yield	Equity Annual Turnover
DFA Emerging Markets Fund	**9.2**	**1.5**	**74,661.2M**	**3.3%**	**10.0%**
MSCI Emerging Markets Index	11.1	1.8	108,811.0	3.3	--

* Risk Statistics are based on monthly data. MSCI does not compute the Weighted Average Market Capitalization - the average market capitalization is used as the best available representation.

* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

DFA Emerging Markets Fund

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = 1.0%	Yes
Beta < 1.20	Beta = 1.00	Yes
Alpha > 0.0%	Alpha = 1.0%	Yes
Peer Group Rank > 50th Percentile	Ranks in Top 33rd Percentile	Yes

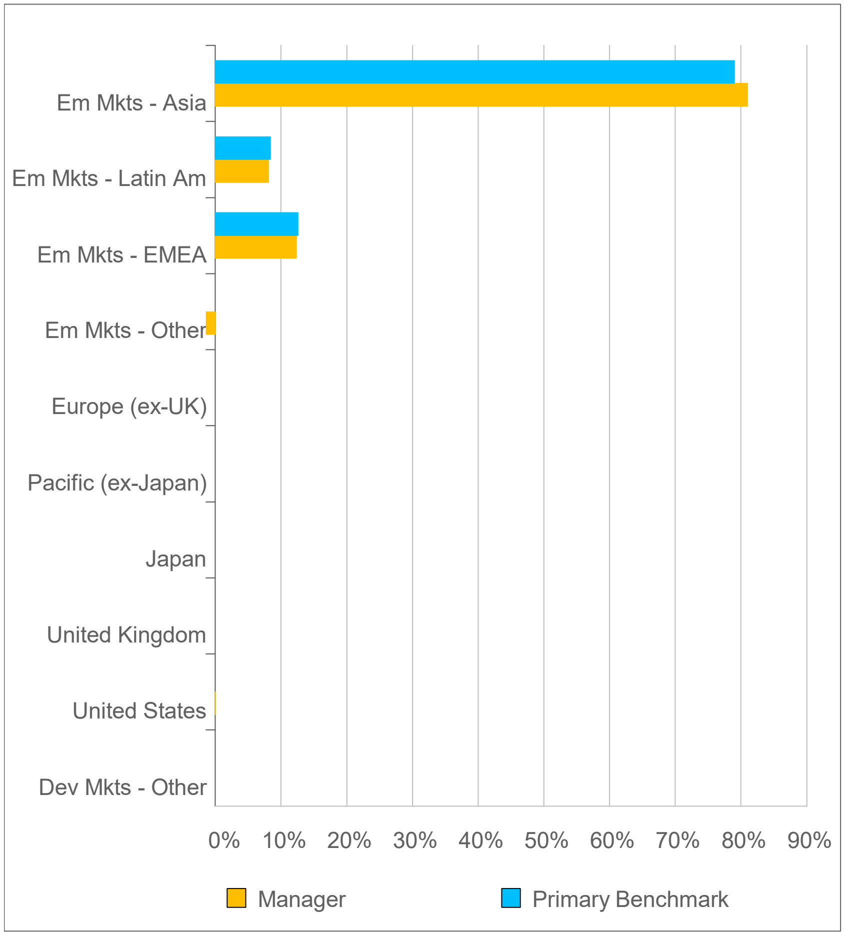
City of Grosse Pointe Woods Employees Retirement System

DFA Emerging Markets Fund

Emerging Markets Sector

Report For Periods Ending March 31, 2023

Region Allocation



Region	Region Weightings Manager	Primary Benchmark	Market Total Returns 3 Months	12 Months
Em Mkts - Asia	81%	79%	4.9%	-8.9%
Em Mkts - Latin Am	8	8	4.0	-10.5
Em Mkts - EMEA	12	13	-1.0	-17.5
Em Mkts - Other	-1	0	-	-
Europe (ex-UK)	0	0	-	-
Pacific (ex-Japan)	0	0	-	8.6
Japan	0	0	-	-
United Kingdom	0	0	-	-
United States	0	0	-	-
Dev Mkts - Other	0	0	-	-

Top Five Countries	Weighting
China	28.5%
India	16.5
Taiwan	15.9
Korea, South	11.8
Brazil	4.9

Number of Holdings: 1848

* Sector weightings may not add up to 100% due to rounding.

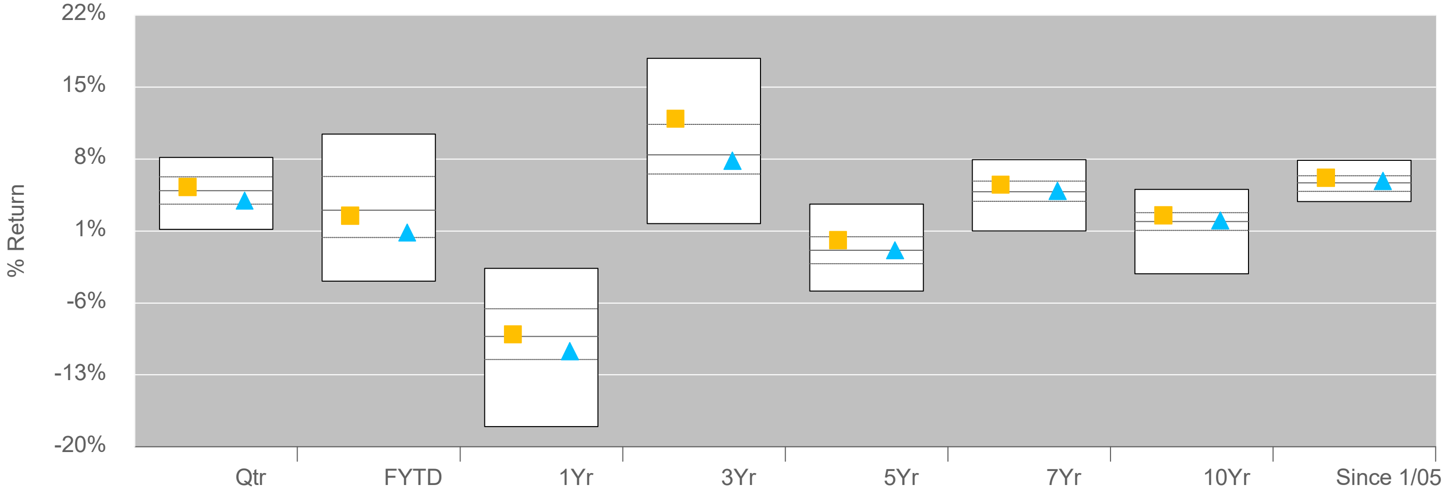
* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

DFA Emerging Markets Fund

Emerging Markets Universe

For Report Periods Ending March 31, 2023



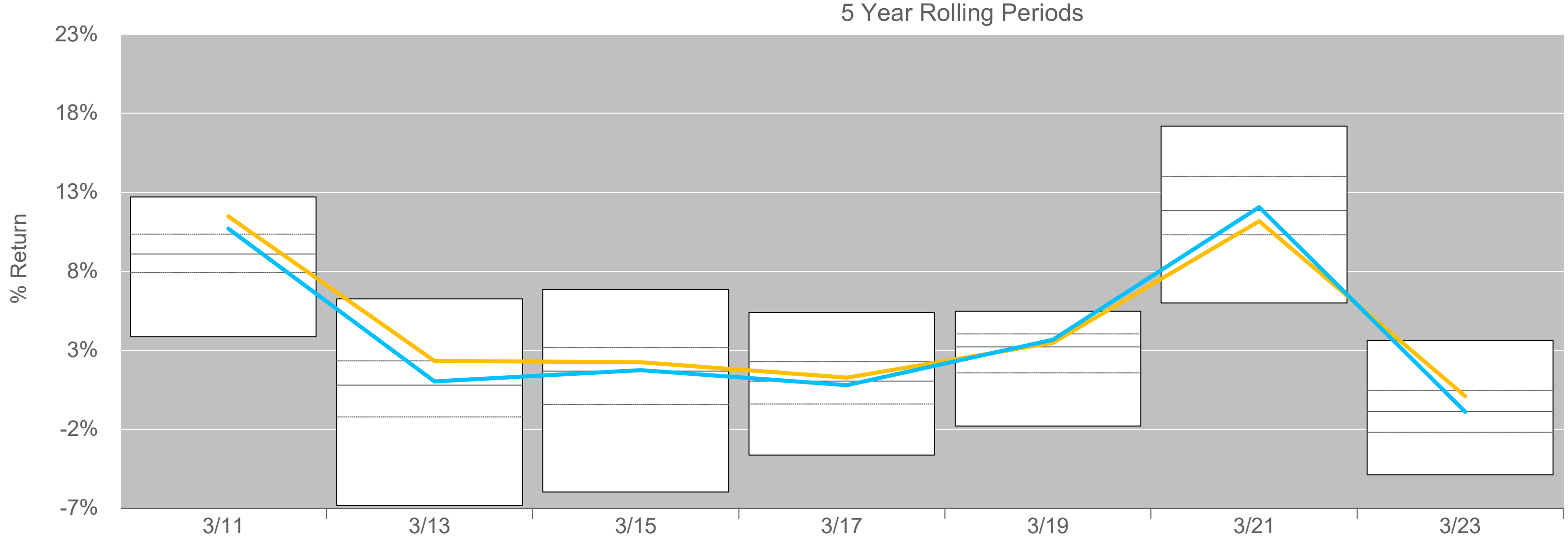
■ - DFA Emerging Markets Fund

▲ - MSCI Emerging Markets Index

	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since 1/05
5th	8.2%	10.4%	-2.6%	17.8%	3.6%	8.0%	5.0%	7.9%
25th	6.3	6.3	-6.6	11.4	0.5	5.9	2.8	6.4
50th	4.9	3.0	-9.3	8.4	-0.9	4.8	1.9	5.7
75th	3.6	0.4	-11.5	6.5	-2.2	3.9	1.0	4.9
95th	1.1	-3.9	-18.0	1.7	-4.9	1.0	-3.2	3.9
■	5.3%	2.5%	-9.1%	11.9%	0.1%	5.5%	2.5%	6.2%
▲	4.0	0.8	-10.7	7.8	-0.9	4.9	2.0	5.9

Report From March 31, 2006 to March 31, 2023

5 Year Rolling Periods



City of Grosse Pointe Woods Employees Retirement System

Dodge & Cox Income Fund

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Inception Date
Dodge & Cox Income Fund	**3.1%**	**1.7%**	**-3.0%**	**0.1%**	**1.9%**	**2.3%**	**2.4%**	**3.9%**	*1/05*
Bloomberg IG Credit Index	3.3	1.2	-5.4	-1.6	1.4	1.6	2.1	3.6	
Bloomberg U.S. Aggregate Index	3.0	-0.1	-4.8	-2.8	0.9	0.9	1.4	3.1	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
Dodge & Cox Income Fund	**0.72**	**0.5%**	**0.95**	**5.6%**	**2.4%**	**0.2**
Bloomberg IG Credit Index	1.00	0.0	1.00	7.6	0.0	--
Bloomberg U.S. Aggregate Index	0.69	-0.5	0.89	5.5	2.1	0.5

Portfolio Statistics	Effective Duration	Wtd Avg Maturity	Wtd Avg Credit	Yield to Worst	FI Annl Turnover
Dodge & Cox Income Fund	**5.5yrs**	**10.4yrs**	**A**	**5.8%**	**118.0%**
Bloomberg IG Credit Index	--	--	--	--	--
Bloomberg U.S. Aggregate Index	6.2	8.4	AA	4.4	--

* Risk Statistics are based on monthly data.

* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Dodge & Cox Income Fund

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = 0.5%	Yes
Beta < 1.20	Beta = 0.72	Yes
Alpha > 0.0%	Alpha = 0.5%	Yes
Peer Group Rank > 50th Percentile	Ranks in Top 5th Percentile	Yes

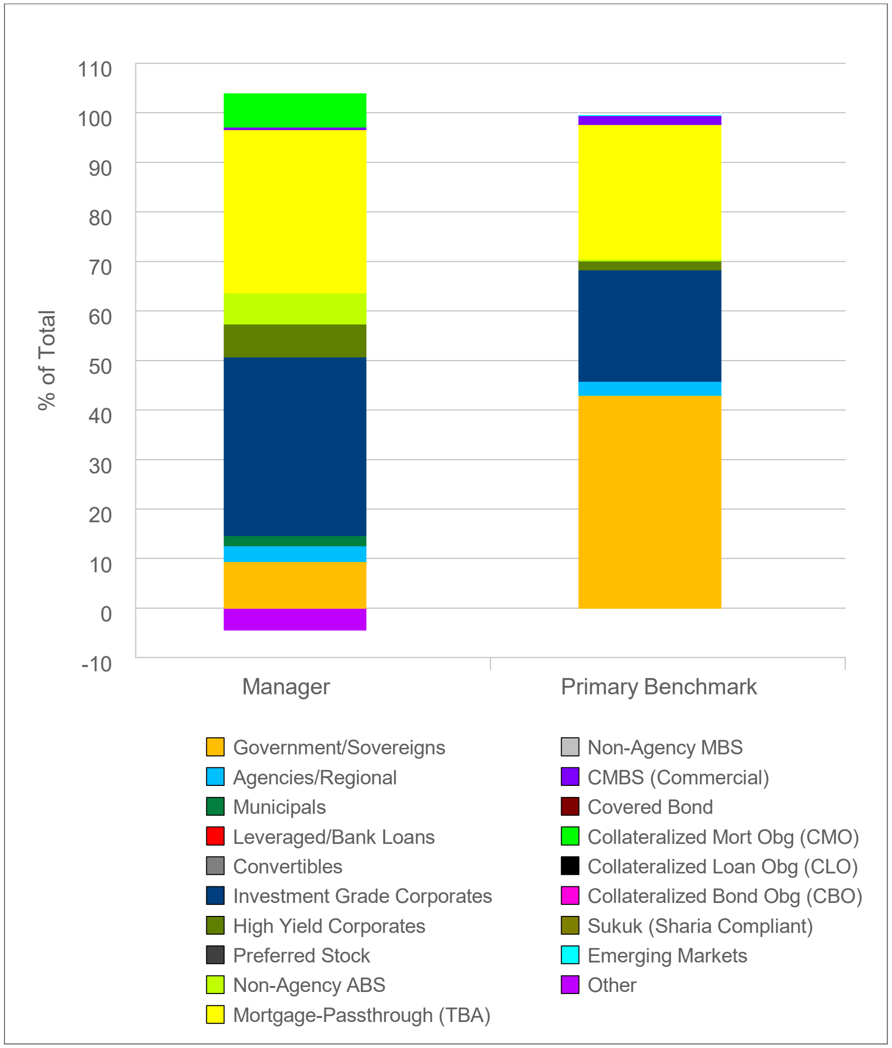
City of Grosse Pointe Woods Employees Retirement System

Dodge & Cox Income Fund

Fixed Income Sector

Report For Periods Ending March 31, 2023

Sector Allocation



	Sector Weightings		Market Total Returns	
Sector	**Manager**	**Benchmark**	**3 Months**	**12 Months**
Total Weighting	100%	100%	3.0%	-4.8%
Government/Sovereigns	9	43	3.0	-4.5
Agencies/Regional	3	3	3.0	-2.9
Municipals	2	0	-	-
Leveraged/Bank Loans	0	0	-	-
Convertibles	0	0	-	-
Investment Grade Corporates	36	23	3.6	-5.6
High Yield Corporates	7	2	3.1	0.0
Preferred Stock	0	0	-	-
Non-Agency ABS	6	0	1.1	-2.8
Mortgage-Passthrough (TBA)	33	27	2.6	-4.9
Non-Agency MBS	0	0	-	-
CMBS (Commercial)	1	2	1.0	-7.2
Covered Bond	0	0	-	-
Collateralized Mort Obg (CMO)	7	0	-	-
Collateralized Loan Obg (CLO)	0	0	-	-
Collateralized Bond Obg (CBO)	0	0	-	-
Sukuk (Sharia Compliant)	0	0	-	-
Emerging Markets	0	0	3.7	-5.8
Other	-4	0	-	-

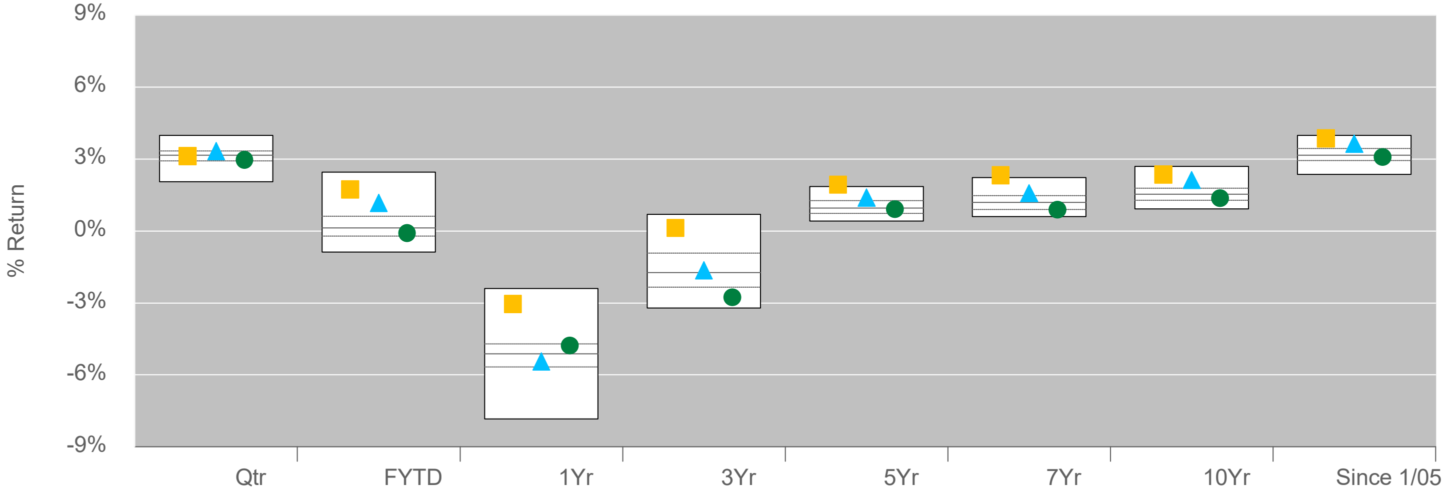
*Sector weightings may not add up to 100% due to rounding.
*Benchmark weightings are for the Bloomberg U.S. Aggregate Index.
* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Dodge & Cox Income Fund

Core Fixed Income Universe

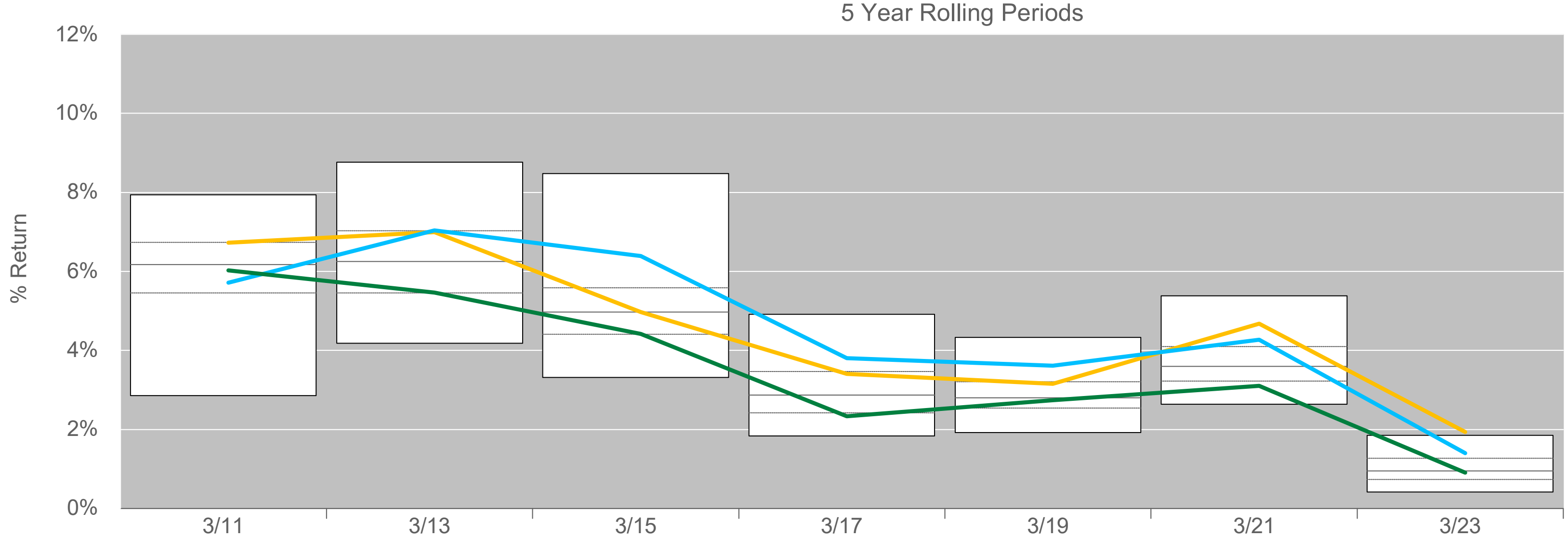
For Report Periods Ending March 31, 2023



■ - Dodge & Cox Income Fund
▲ - Bloomberg IG Credit Index
● - Bloomberg U.S. Aggregate Index

	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since 1/05
5th	4.0%	2.5%	-2.4%	0.7%	1.9%	2.2%	2.7%	4.0%
25th	3.3	0.6	-4.7	-0.9	1.3	1.5	1.8	3.4
50th	3.2	0.1	-5.1	-1.7	1.0	1.2	1.5	3.2
75th	2.9	-0.2	-5.7	-2.3	0.7	0.9	1.3	2.9
95th	2.0	-0.9	-7.8	-3.2	0.4	0.6	0.9	2.4
■	3.1%	1.7%	-3.0%	0.1%	1.9%	2.3%	2.4%	3.9%
▲	3.3	1.2	-5.4	-1.6	1.4	1.6	2.1	3.6
●	3.0	-0.1	-4.8	-2.8	0.9	0.9	1.4	3.1

Report From March 31, 2006 to March 31, 2023
5 Year Rolling Periods



City of Grosse Pointe Woods Employees Retirement System

DoubleLine Total Return Bond Fund

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Inception Date
DoubleLine Total Return Bond Fund	**3.3%**	**-1.2%**	**-5.1%**	**-1.7%**	**0.4%**	**0.8%**	**1.5%**	**3.6%**	*4/10*
Bloomberg U.S. MBS Index	2.5	-0.9	-4.9	-3.3	0.2	0.3	1.0	1.7	
Bloomberg U.S. Aggregate Index	3.0	-0.1	-4.8	-2.8	0.9	0.9	1.4	2.2	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
DoubleLine Total Return Bond Fund	**0.77**	**-0.1%**	**0.68**	**4.9%**	**3.0%**	**0.1**
Bloomberg U.S. MBS Index	1.00	0.0	1.00	5.2	0.0	--
Bloomberg U.S. Aggregate Index	0.98	0.7	0.86	5.5	2.2	-0.2

Portfolio Statistics	Effective Duration	Wtd Avg Maturity	Wtd Avg Credit	Yield to Worst	FI Annl Turnover
DoubleLine Total Return Bond Fund	**6.0 yrs**	**7.5 yrs**	**A-**	**6.3%**	**89.0%**
Bloomberg U.S. MBS Index	--	--	--	--	--
Bloomberg U.S. Aggregate Index	6.2	8.4	AA	4.4	--

* Risk Statistics are based on monthly data.
* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

DoubleLine Total Return Bond Fund

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = 0.2%	Yes
Beta < 1.20	Beta = 0.77	Yes
Alpha > 0.0%	Alpha = -0.1%	No
Peer Group Rank > 50th Percentile	Ranks in Bottom 5th Percentile	No

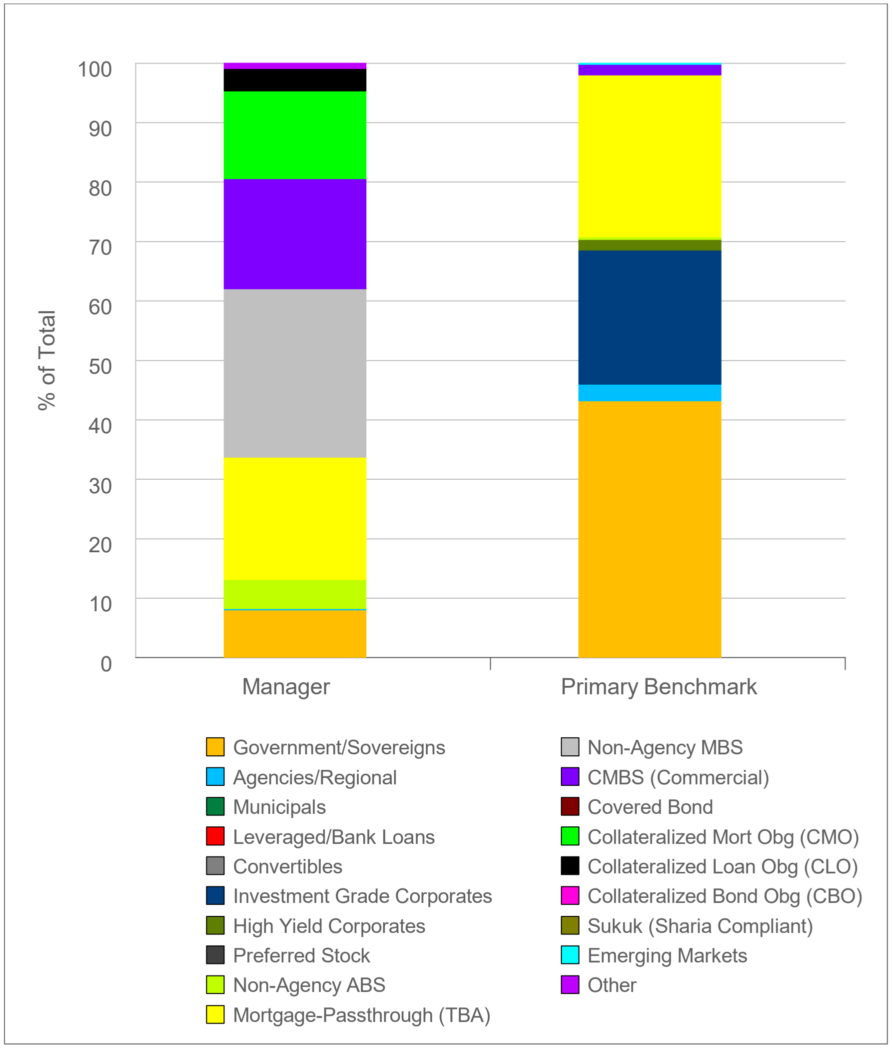
City of Grosse Pointe Woods Employees Retirement System

DoubleLine Total Return Bond Fund

Fixed Income Sector

Report For Periods Ending March 31, 2023

Sector Allocation



	Sector Weightings		Market Total Returns	
Sector	**Manager**	**Benchmark**	**3 Months**	**12 Months**
Total Weighting	100%	100%	3.0%	-4.8%
Government/Sovereigns	8	43	3.0	-4.5
Agencies/Regional	0	3	3.0	-2.9
Municipals	0	0	-	-
Leveraged/Bank Loans	0	0	-	-
Convertibles	0	0	-	-
Investment Grade Corporates	0	23	3.6	-5.6
High Yield Corporates	0	2	3.1	0.0
Preferred Stock	0	0	-	-
Non-Agency ABS	5	0	1.1	-2.8
Mortgage-Passthrough (TBA)	21	27	2.6	-4.9
Non-Agency MBS	28	0	-	-
CMBS (Commercial)	19	2	1.0	-7.2
Covered Bond	0	0	-	-
Collateralized Mort Obg (CMO)	15	0	-	-
Collateralized Loan Obg (CLO)	4	0	-	-
Collateralized Bond Obg (CBO)	0	0	-	-
Sukuk (Sharia Compliant)	0	0	-	-
Emerging Markets	0	0	3.7	-5.8
Other	1	0	-	-

*Sector weightings may not add up to 100% due to rounding.

*Benchmark weightings are for the Bloomberg U.S. Aggregate Index.

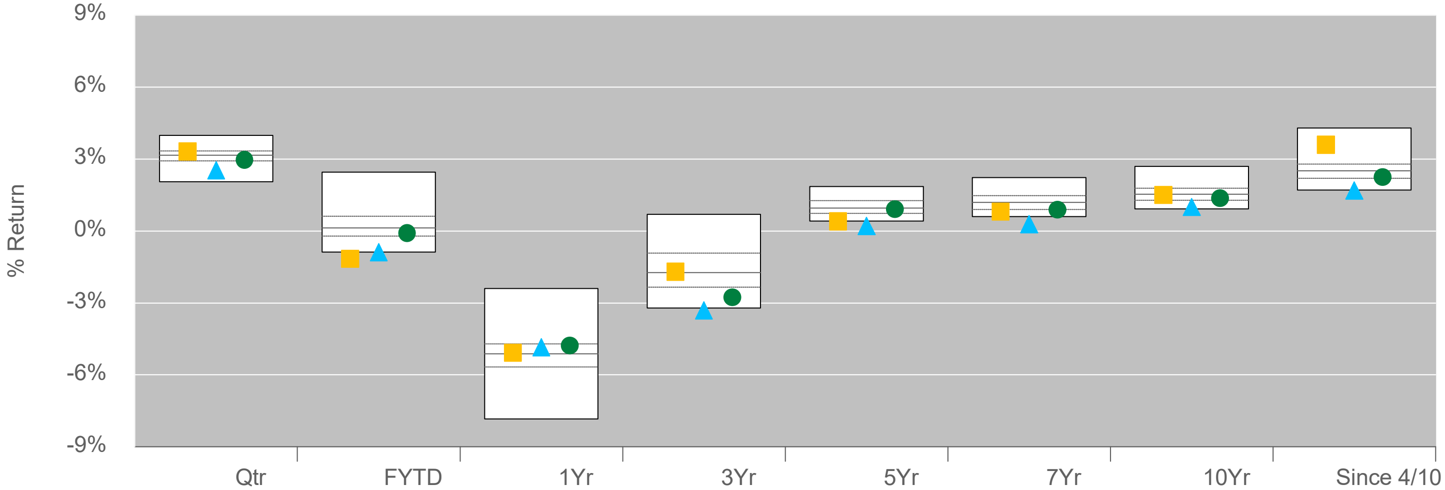
* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

DoubleLine Total Return Bond Fund

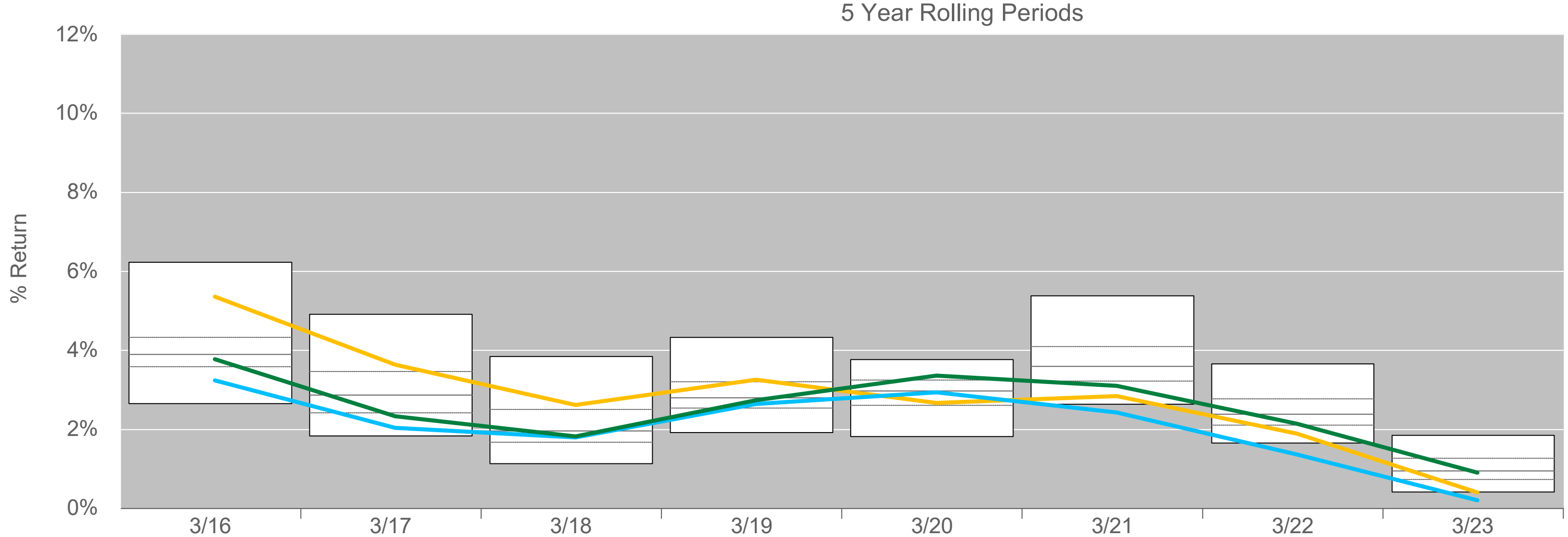
Core Fixed Income Universe

For Report Periods Ending March 31, 2023



	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since 4/10
5th	4.0%	2.5%	-2.4%	0.7%	1.9%	2.2%	2.7%	4.3%
25th	3.3	0.6	-4.7	-0.9	1.3	1.5	1.8	2.8
50th	3.2	0.1	-5.1	-1.7	1.0	1.2	1.5	2.5
75th	2.9	-0.2	-5.7	-2.3	0.7	0.9	1.3	2.2
95th	2.0	-0.9	-7.8	-3.2	0.4	0.6	0.9	1.7
■	3.3%	-1.2%	-5.1%	-1.7%	0.4%	0.8%	1.5%	3.6%
▲	2.5	-0.9	-4.9	-3.3	0.2	0.3	1.0	1.7
●	3.0	-0.1	-4.8	-2.8	0.9	0.9	1.4	2.2

Report From March 31, 2011 to March 31, 2023
5 Year Rolling Periods



City of Grosse Pointe Woods Employees Retirement System

Vanguard Total Bond Fund

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Inception Date
Vanguard Total Bond Fund	**3.2%**	**0.0%**	**-4.7%**	**-2.8%**	**0.9%**	**0.9%**	**1.3%**	**3.1%**	*1/05*
Bloomberg U.S. Aggregate Index	3.0	-0.1	-4.8	-2.8	0.9	0.9	1.4	3.1	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
Vanguard Total Bond Fund	**1.01**	**0.0%**	**1.00**	**5.6%**	**0.3%**	**0.0**
Bloomberg U.S. Aggregate Index	1.00	0.0	1.00	5.5	0.0	--

Portfolio Statistics	Effective Duration	Wtd Avg Maturity	Wtd Avg Credit	Yield to Worst	FI Annl Turnover
Vanguard Total Bond Fund	**6.2 yrs**	**8.4 yrs**	**AA**	**4.4%**	**--%**
Bloomberg U.S. Aggregate Index	6.2	8.4	AA	4.4	--

* Risk Statistics are based on monthly data.

* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Vanguard Total Bond Fund

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = 0.0%	Yes
Beta < 1.20	Beta = 1.01	Yes
Alpha > 0.0%	Alpha = 0.0%	Yes
Peer Group Rank > 50th Percentile	Ranks in Bottom 50th Percentile	No

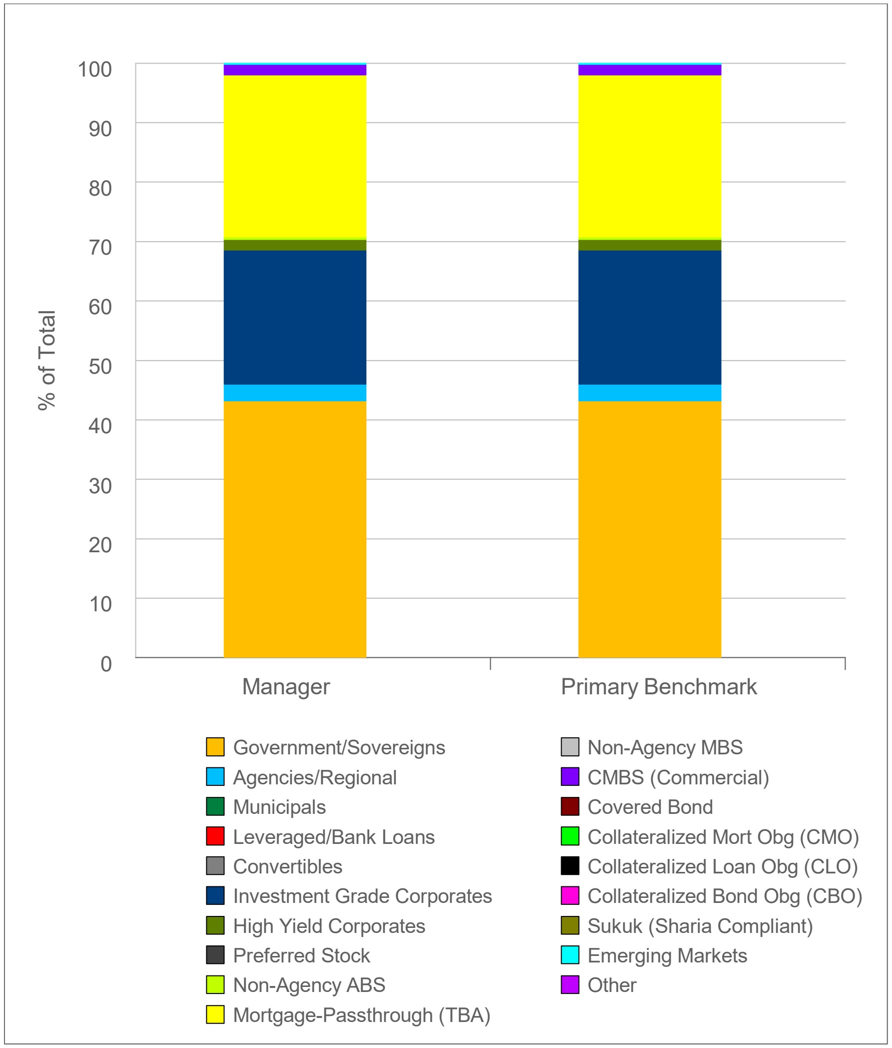
City of Grosse Pointe Woods Employees Retirement System

Vanguard Total Bond Fund

Fixed Income Sector

Report For Periods Ending March 31, 2023

Sector Allocation



	Sector Weightings		Market Total Returns	
Sector	Manager	Primary Benchmark	3 Months	12 Months
Total Weighting	100%	100%	3.0%	-4.8%
Government/Sovereigns	43	43	3.0	-4.5
Agencies/Regional	3	3	3.0	-2.9
Municipals	0	0	-	-
Leveraged/Bank Loans	0	0	-	-
Convertibles	0	0	-	-
Investment Grade Corporates	23	23	3.6	-5.6
High Yield Corporates	2	2	3.1	0.0
Preferred Stock	0	0	-	-
Non-Agency ABS	0	0	1.1	-2.8
Mortgage-Passthrough (TBA)	27	27	2.6	-4.9
Non-Agency MBS	0	0	-	-
CMBS (Commercial)	2	2	1.0	-7.2
Covered Bond	0	0	-	-
Collateralized Mort Obg (CMO)	0	0	-	-
Collateralized Loan Obg (CLO)	0	0	-	-
Collateralized Bond Obg (CBO)	0	0	-	-
Sukuk (Sharia Compliant)	0	0	-	-
Emerging Markets	0	0	3.7	-5.8
Other	0	0	-	-

*Sector weightings may not add up to 100% due to rounding.

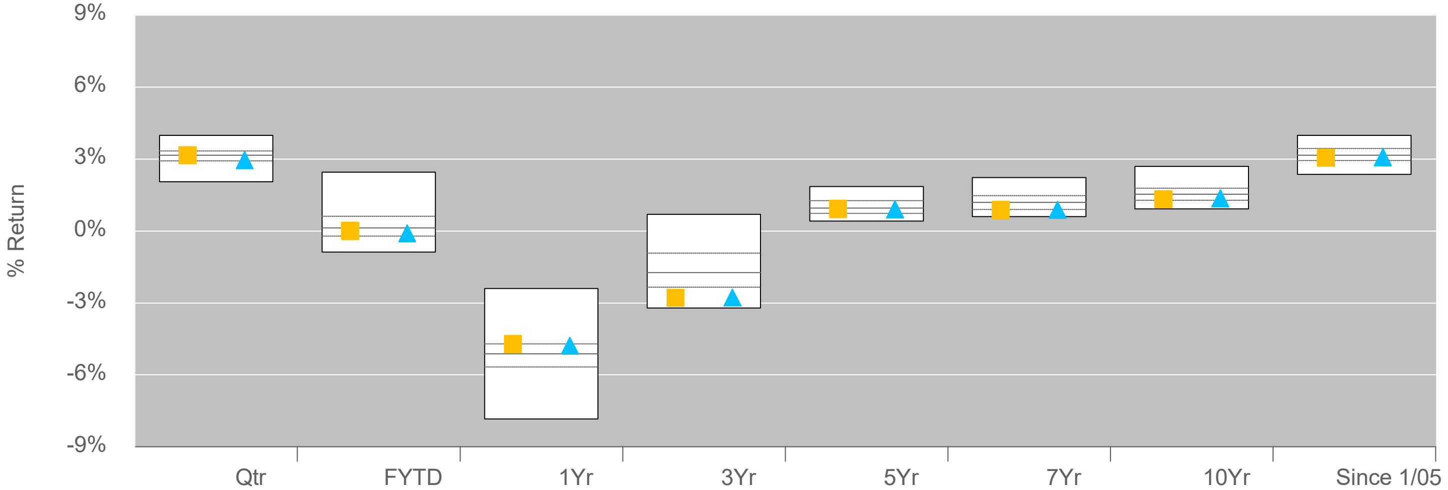
* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Vanguard Total Bond Fund

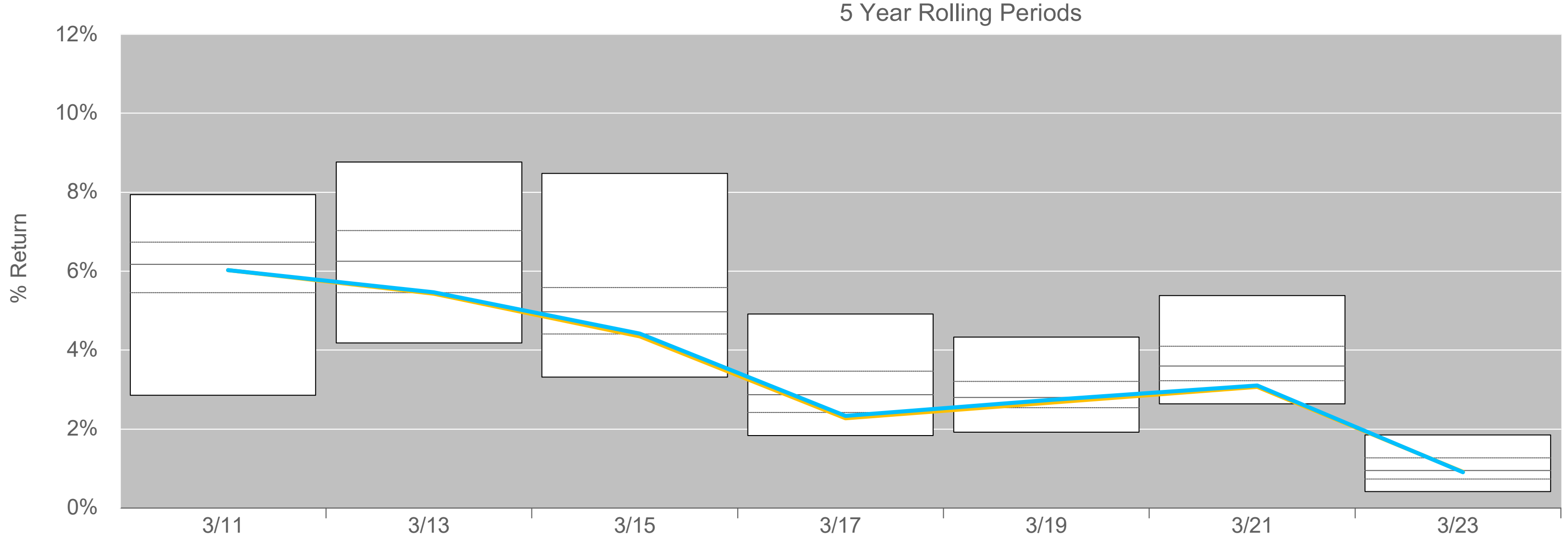
Core Fixed Income Universe

For Report Periods Ending March 31, 2023



	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since 1/05
5th	4.0%	2.5%	-2.4%	0.7%	1.9%	2.2%	2.7%	4.0%
25th	3.3	0.6	-4.7	-0.9	1.3	1.5	1.8	3.4
50th	3.2	0.1	-5.1	-1.7	1.0	1.2	1.5	3.2
75th	2.9	-0.2	-5.7	-2.3	0.7	0.9	1.3	2.9
95th	2.0	-0.9	-7.8	-3.2	0.4	0.6	0.9	2.4
■	3.2%	0.0%	-4.7%	-2.8%	0.9%	0.9%	1.3%	3.1%
▲	3.0	-0.1	-4.8	-2.8	0.9	0.9	1.4	3.1

Report From March 31, 2006 to March 31, 2023
5 Year Rolling Periods



City of Grosse Pointe Woods Employees Retirement System

Principal Real Estate Securities Fund

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Inception Date
Principal Real Estate Securities Fund	**3.3%**	**-3.3%**	**-18.5%**	**10.5%**	**6.7%**	**5.3%**	**7.4%**	**8.3%**	*1/05*
FTSE NAREIT Equity REIT Index	2.7	-2.7	-19.2	12.1	6.0	4.1	6.0	7.2	
FTSE NAREIT All Equity Index	1.7	-5.5	-19.4	10.2	6.3	5.0	6.5	7.5	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
Principal Real Estate Securities Fund	**0.91**	**1.0%**	**0.98**	**20.7%**	**3.3%**	**0.2**
FTSE NAREIT Equity REIT Index	1.00	0.0	1.00	22.5	0.0	--
FTSE NAREIT All Equity Index	0.95	0.5	0.98	21.4	2.6	0.2

Portfolio Statistics	Current P/FFO	Growth in FFO	Wtd Avg Mkt Cap	Current Yield	Equity Annual Turnover
Principal Real Estate Securities Fund	**16.4**	**11.3%**	**27,044.4M**	**3.7%**	**19.4%**
FTSE NAREIT Equity REIT Index	13.9	0.4	33,753.0	4.1	--
FTSE NAREIT All Equity Index	14.0	0.3	39,210.0	3.9	--

* Risk Statistics are based on monthly data.

* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Principal Real Estate Securities Fund

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = 0.6%	Yes
Beta < 1.20	Beta = 0.91	Yes
Alpha > 0.0%	Alpha = 1.0%	Yes
Peer Group Rank > 50th Percentile	Ranks in Top 25th Percentile	Yes

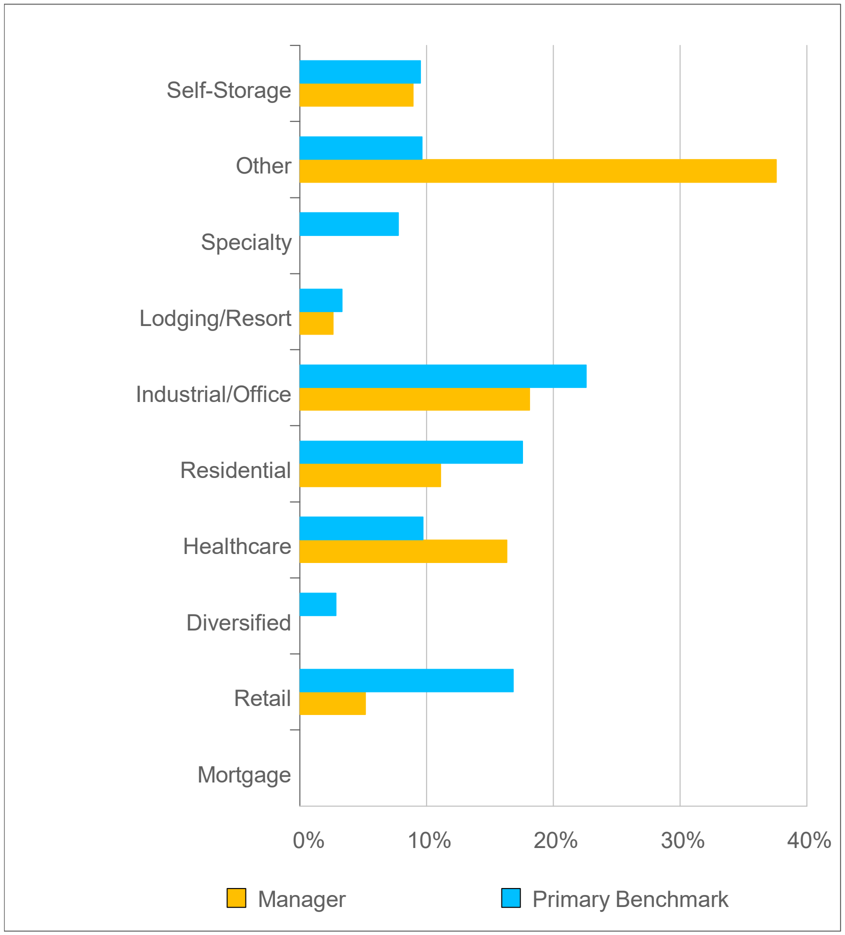
City of Grosse Pointe Woods Employees Retirement System

Principal Real Estate Securities Fund

Real Estate Sector

Report For Periods Ending March 31, 2023

Sector Allocation



	Sector Weightings		Market Total Returns	
Sector	**Manager**	**Primary Benchmark**	**3 Months**	**12 Months**
Self-Storage	9%	10%	13.2%	-15.4%
Other	38	10	6.9	-10.9
Specialty	0	8	3.4	0.7
Lodging/Resort	3	3	3.0	-18.4
Industrial/Office	18	23	2.2	-27.7
Residential	11	18	2.1	-26.0
Healthcare	16	10	0.1	-25.8
Diversified	0	3	-1.2	-12.5
Retail	5	17	-1.5	-8.5
Mortgage	0	0	-	

* Sector weightings may not add up to 100% due to rounding.

* Accrued income in total market value may not be available for all managers.

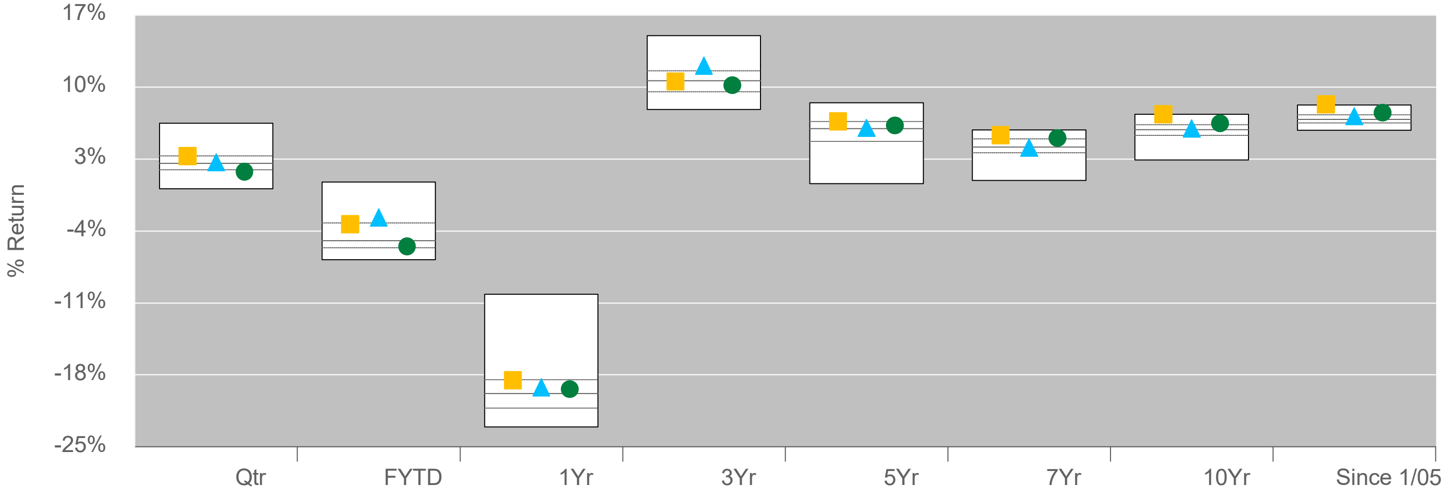
* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Principal Real Estate Securities Fund

REIT Manager Universe

For Report Periods Ending March 31, 2023

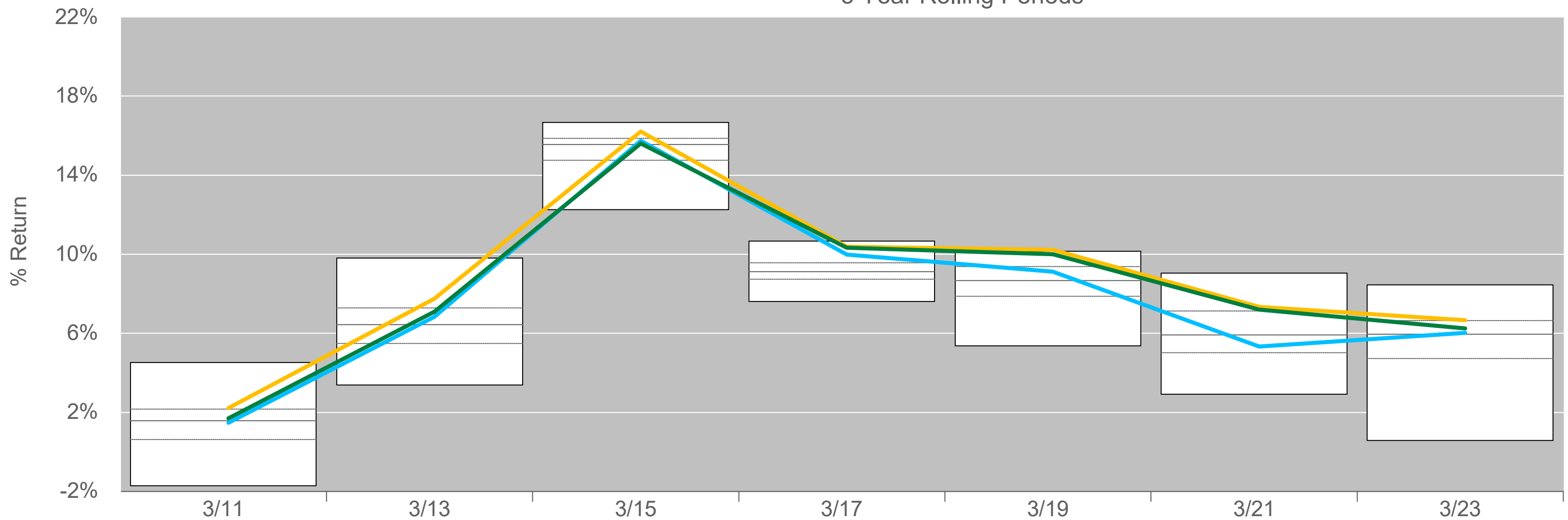


■ - Principal Real Estate Securities Fund
▲ - FTSE NAREIT Equity REIT Index
● - FTSE NAREIT All Equity Index

	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since 1/05
5th	6.5%	0.8%	-10.2%	15.0%	8.5%	5.8%	7.4%	8.3%
25th	3.3	-3.2	-18.5	11.6	6.6	5.0	6.3	7.3
50th	2.6	-4.9	-19.8	10.6	6.0	4.2	5.8	6.9
75th	2.0	-5.6	-21.2	9.5	4.7	3.6	5.3	6.5
95th	0.1	-6.8	-23.1	7.8	0.6	0.9	2.9	5.8
■	3.3%	-3.3%	-18.5%	10.5%	6.7%	5.3%	7.4%	8.3%
▲	2.7	-2.7	-19.2	12.1	6.0	4.1	6.0	7.2
●	1.7	-5.5	-19.4	10.2	6.3	5.0	6.5	7.5

Report From March 31, 2006 to March 31, 2023

5 Year Rolling Periods



City of Grosse Pointe Woods Employees Retirement System

Tortoise MLP & Pipeline Fund

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Inception Date
Tortoise MLP & Pipeline Fund	**0.4%**	**11.4%**	**0.4%**	**33.9%**	**6.5%**	**7.1%**	**3.2%**	**6.1%**	*5/11*
Alerian MLP Index	4.1	23.8	14.7	47.1	7.4	5.6	0.6	3.2	
Tortoise North American Pipeline Index	0.2	4.6	-2.8	28.7	9.1	8.9	5.6	--	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
Tortoise MLP & Pipeline Fund	**0.76**	**0.5%**	**0.93**	**35.5%**	**12.7%**	**-0.1**
Alerian MLP Index	1.00	0.0	1.00	47.3	0.0	--
Tortoise North American Pipeline Index	0.63	3.9	0.89	30.1	6.3	-0.4

* Risk Statistics are based on monthly data.

* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Tortoise MLP & Pipeline Fund

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

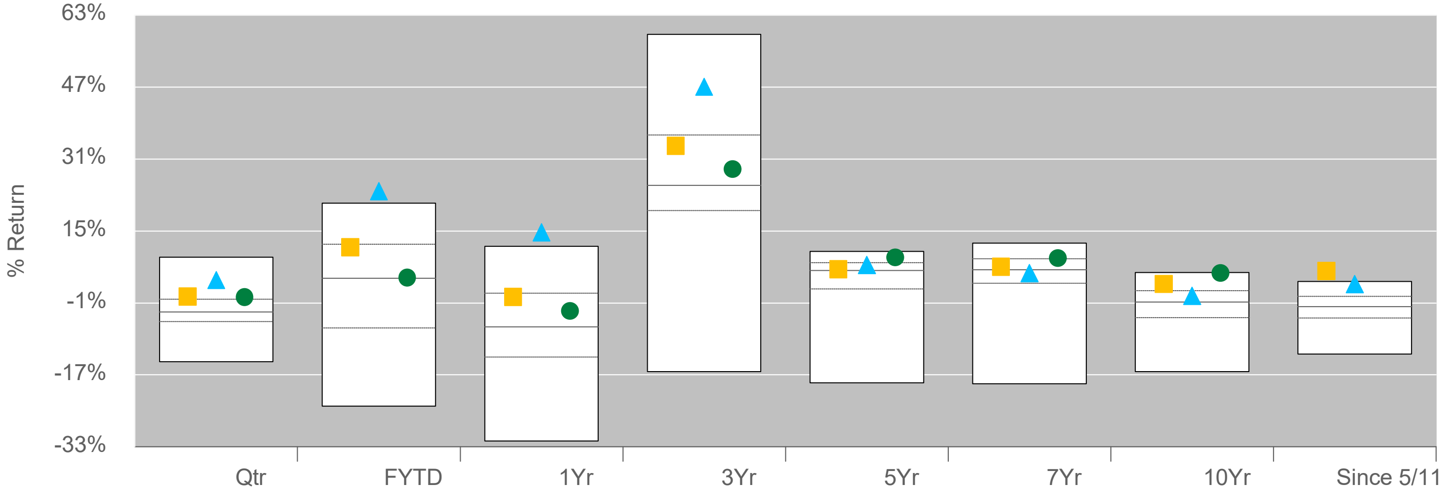
Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = -0.9%	No
Beta < 1.20	Beta = 0.76	Yes
Alpha > 0.0%	Alpha = 0.5%	Yes
Peer Group Rank > 50th Percentile	Ranks in Top 50th Percentile	Yes

City of Grosse Pointe Woods Employees Retirement System

Tortoise MLP & Pipeline Fund

Natural Resources Universe

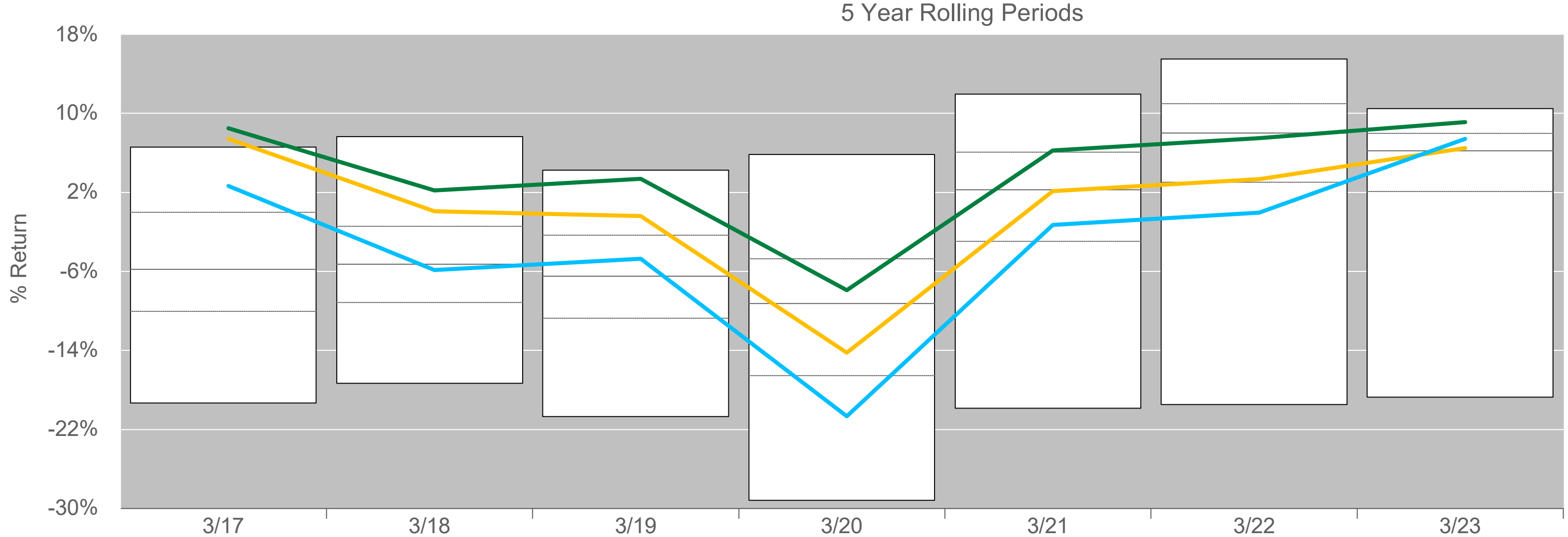
For Report Periods Ending March 31, 2023



■ - Tortoise MLP & Pipeline Fund
▲ - Alerian MLP Index
● - Tortoise North American Pipeline Index

	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since 5/11
5th	9.2%	21.2%	11.7%	58.8%	10.5%	12.3%	5.8%	3.8%
25th	-0.2	12.0	1.1	36.4	8.0	8.8	1.7	0.4
50th	-3.0	4.5	-6.4	25.2	6.2	6.4	-0.8	-1.8
75th	-5.2	-6.6	-13.0	19.5	2.1	3.4	-4.3	-4.4
95th	-14.1	-24.0	-31.7	-16.3	-18.8	-19.0	-16.3	-12.4
■	0.4%	11.4%	0.4%	33.9%	6.5%	7.1%	3.2%	6.1%
▲	4.1	23.8	14.7	47.1	7.4	5.6	0.6	3.2
●	0.2	4.6	-2.8	28.7	9.1	8.9	5.6	

Report From March 31, 2012 to March 31, 2023
5 Year Rolling Periods



City of Grosse Pointe Woods Employees Retirement System

Cohen & Steers Global Listed Infrastructure

Summary of Performance and Statistics

Report For Periods Ending March 31, 2023

Performance Results	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since Inception	Inception Date
Cohen & Steers Global Listed Infrastructure	**0.8%**	**0.1%**	**-6.8%**	**10.3%**	**6.6%**	**6.7%**	**6.8%**	**6.8%**	*1/05*
FTSE Global Core Infrastructure 50/50	0.6	-0.3	-7.8	10.3	5.8	6.2	6.2	--	
DJ Brookfield Global Infrastructure Index	3.1	1.2	-6.1	12.2	5.6	5.7	5.2	8.1	

Risk Statistics (5 years)	Beta	Alpha	R^2	Standard Deviation	Tracking Error	Information Ratio
Cohen & Steers Global Listed Infrastructure	**0.92**	**1.1%**	**0.97**	**15.7%**	**2.9%**	**0.3**
FTSE Global Core Infrastructure 50/50	1.00	0.0	1.00	16.6	0.0	--
DJ Brookfield Global Infrastructure Index	1.10	-0.6	0.95	18.8	5.3	0.2

Asset Growth Summary (in thousands)

Beginning Market Value	$	0
Net Contributions/(Distributions)	$	0
Market Appreciation/(Depreciation)	**$**	**0**
Ending Market Value	**$**	**0**

* Risk Statistics are based on monthly data.

* Manager data represents the most current available at the time of report publication.

City of Grosse Pointe Woods Employees Retirement System

Cohen & Steers Global Listed Infrastructure

Summary of Performance Relative to Investment Policy Statement Objectives

Report For Periods Ending March 31, 2023

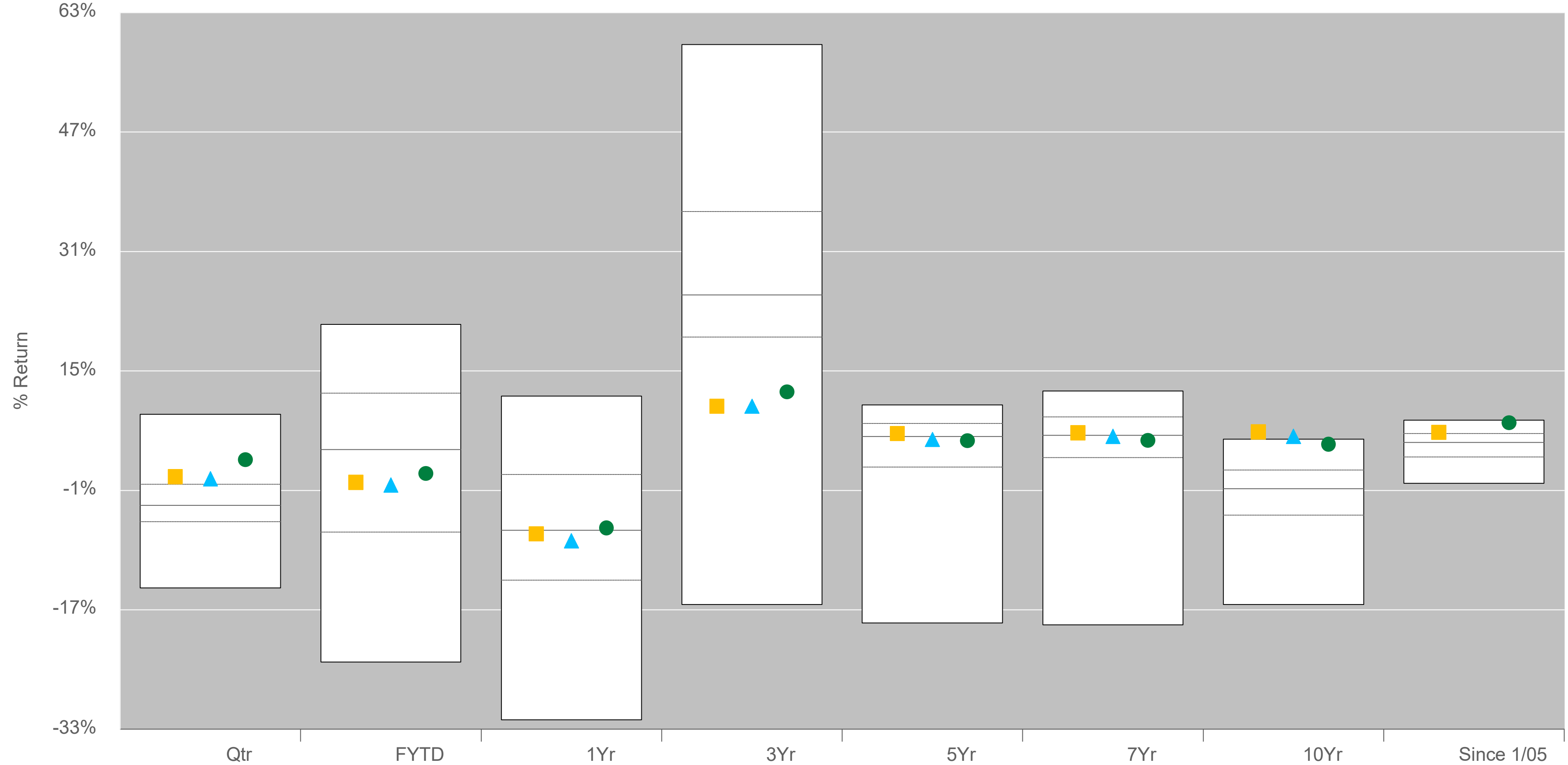
Performance Objectives	Result	Objective Achieved
Measurement Period: Moving 5 Year		
Return > Benchmark	Return over benchmark = 0.8%	Yes
Beta < 1.20	Beta = 0.92	Yes
Alpha > 0.0%	Alpha = 1.1%	Yes
Peer Group Rank > 50th Percentile	Ranks in Top 50th Percentile	Yes

City of Grosse Pointe Woods Employees Retirement System

Cohen & Steers Global Listed Infrastructure

Natural Resources Universe

For Report Periods Ending March 31, 2023



	Qtr	FYTD	1Yr	3Yr	5Yr	7Yr	10Yr	Since 1/05
5th Percentile	9.2%	21.2%	11.7%	58.8%	10.5%	12.3%	5.8%	8.4%
25th Percentile	-0.2	12.0	1.1	36.4	8.0	8.8	1.7	6.6
50th Percentile	-3.0	4.5	-6.4	25.2	6.2	6.4	-0.8	5.4
75th Percentile	-5.2	-6.6	-13.0	19.5	2.1	3.4	-4.3	3.5
95th Percentile	-14.1	-24.0	-31.7	-16.3	-18.8	-19.0	-16.3	0.0
■ - Cohen & Steers Global Listed Infrastructure	0.8%	0.1%	-6.8%	10.3%	6.6%	6.7%	6.8%	6.8%
▲ - FTSE Global Core Infrastructure 50/50	0.6	-0.3	-7.8	10.3	5.8	6.2	6.2	- -
● - DJ Brookfield Global Infrastructure Index	3.1	1.2	-6.1	12.2	5.6	5.7	5.2	8.1

City of Grosse Pointe Woods Employees Retirement System

Breakdown of Fees

Report For Periods Ending March 31, 2023

	Annual Fee/ Expense Ratio	Market Value	Percent Allocation	Weighted Average Fee	Annualized Fee
iShares S&P 500 Index	0.04%	$12,993,828	31.3%	0.01%	$5,198
iShares Russell Midcap Index	0.20%	$2,070,541	5.0%	0.01%	$4,141
Vanguard S&P Small Cap 600 Index	0.10%	$3,093,266	7.4%	0.01%	$3,093
EuroPacific Growth Fund	0.57%	$4,128,821	9.9%	0.06%	$23,534
Templeton Inst'l Foreign Smaller Co.	1.04%	$1,046,520	2.5%	0.03%	$10,884
Brown International Small Company	1.08%	$997,012	2.4%	0.03%	$10,768
Redwheel Global Emerging Equity Fund	1.29%	$1,213,268	2.9%	0.04%	$15,651
DFA Emerging Markets Fund	0.36%	$2,688,085	6.5%	0.02%	$9,677
Dodge & Cox Income Fund	0.43%	$2,344,470	5.6%	0.02%	$10,081
DoubleLine Total Return Bond Fund	0.48%	$2,086,195	5.0%	0.02%	$10,014
Vanguard Total Bond Fund	0.05%	$2,265,789	5.5%	0.00%	$1,133
Gateway Fund	0.70%	$1,707,652	4.1%	0.03%	$11,954
PIMCO All Asset Fund	0.87%	$1,381,115	3.3%	0.03%	$12,016
Principal Real Estate Securities Fund	0.91%	$885,476	2.1%	0.02%	$8,058
Tortoise MLP & Pipeline Fund	0.97%	$1,064,178	2.6%	0.02%	$10,323
Cohen & Steers Global Listed Infrastructure	0.94%	$1,167,974	2.8%	0.03%	$10,979
Schwab Government Money Fund	0.23%	$418,348	1.0%	0.00%	$962
Total Investment Management Fees		**$41,552,538**	**100.0%**	**0.38%**	**$158,465**

* Mutual Fund expense ratios are deducted from the NAV of the fund.
* Annualized fee is an estimate based on market values as of March 31, 2023.

Index Summary Sheet for Periods Ending March 31, 2023

Global Equity	Qtr	YTD	1 Yr	Annualized 3 Yr	Annualized 5 Yr	Annualized 10 Yr
MSCI AC World Index	7.3%	7.3%	-7.4%	15.4%	6.9%	8.1%
MSCI World Index	7.7	7.7	-7.0	16.4	8.0	8.9
S&P 500 Index	7.5	7.5	-7.7	18.6	11.2	12.2
Russell 3000 Index	7.2	7.2	-8.6	18.5	10.5	11.7
Russell 1000 Index	7.5	7.5	-8.4	18.6	10.9	12.0
Russell 1000 Growth Index	14.4	14.4	-10.9	18.6	13.7	14.6
Russell 1000 Value Index	1.0	1.0	-5.9	17.9	7.5	9.1
Russell Midcap Index	4.1	4.1	-8.8	19.2	8.1	10.1
Russell Midcap Growth Index	9.1	9.1	-8.5	15.2	9.1	11.2
Russell Midcap Value Index	1.3	1.3	-9.2	20.7	6.5	8.8
Russell 2000 Index	2.7	2.7	-11.6	17.5	4.7	8.0
Russell 2000 Growth Index	6.1	6.1	-10.6	13.4	4.3	8.5
Russell 2000 Value Index	-0.7	-0.7	-13.0	21.0	4.5	7.2
Russell Microcap Index	-2.8	-2.8	-17.9	17.2	3.0	7.3
MSCI AC World Index ex-U.S.	6.9	6.9	-5.1	11.8	2.5	4.2
MSCI EAFE Index	8.5	8.5	-1.4	13.0	3.6	5.0
MSCI EAFE Growth Index	11.1	11.1	-2.8	10.9	4.9	6.0
MSCI EAFE Value Index	5.9	5.9	-0.3	14.6	1.8	3.7
MSCI Small Cap EAFE Index	4.9	4.9	-9.8	12.1	0.9	5.8
MSCI Emerging Markets Index	4.0	4.0	-10.7	7.8	-0.9	2.0
MSCI Emerging Markets Small Cap Index	3.9	3.9	-11.0	20.7	1.8	3.2
MSCI Frontier Markets Index	3.1	3.1	-17.5	7.9	-2.8	2.7
HFRI Equity Hedge Index	3.4	3.4	-2.9	12.7	5.2	5.4
HFRI Emerging Markets	2.2	2.2	-4.7	8.1	1.1	2.8
HFRI FOF: Strategic Index	2.9	2.9	-3.2	7.9	2.6	3.3
Thomson One All Private Capital Index	0.0	0.0	-6.2	19.9	13.6	13.1
Thomson One Buyout Index	0.0	0.0	-6.3	20.3	14.0	14.4
Thomson One Fund of Funds Index	0.0	0.0	-7.8	22.0	16.2	14.2
Thomson One Venture Capital Index	0.0	0.0	-11.1	26.0	21.3	19.0
Global Fixed Income						
Bloomberg U.S. Aggregate Index	3.0	3.0	-4.8	-2.8	0.9	1.4
Bloomberg U.S. TIPS Index	3.3	3.3	-6.1	1.8	2.9	1.5
Bloomberg Government Bond Index	3.0	3.0	-4.4	-4.1	0.8	0.9
Bloomberg Municipals Index	2.8	2.8	0.3	0.3	2.0	2.4
Bloomberg Asset Backed Index	1.9	1.9	0.4	0.6	1.6	1.4

Index Summary Sheet for Periods Ending March 31, 2023

				Annualized		
Global Fixed Income (continued)	**Qtr**	**YTD**	**1 Yr**	**3 Yr**	**5 Yr**	**10 Yr**
Bloomberg US MBS Index	2.5%	2.5%	-4.9%	-3.3%	0.2%	1.0%
Bloomberg IG CMBS Index	1.7	1.7	-4.1	-1.3	1.3	1.8
Bloomberg U.S. Credit Index	3.5	3.5	-5.3	-0.7	1.5	2.2
Bloomberg U.S. Corporate HY Index	3.6	3.6	-3.3	5.9	3.2	4.1
Bloomberg Intermediate U.S. G/C Index	2.3	2.3	-1.7	-1.3	1.4	1.3
ICE BofA 1-3 Yr. Govt. Bond Index	1.6	1.6	0.2	-0.8	1.1	0.8
U.S. 91-Day Treasury Bills	1.1	1.1	3.1	1.1	1.4	0.9
CS Leveraged Loan Index	3.2	3.2	2.2	8.4	3.5	3.9
JPMorgan Non-U.S. GBI Hedged Index	3.3	3.3	-5.4	-2.9	0.2	2.0
JPMorgan Non-U.S. GBI Index	3.2	3.2	-13.1	-6.5	-4.4	-1.5
JPMorgan EMBI Plus Index	1.9	1.9	-8.4	-4.9	-3.1	0.2
JPMorgan EMBI Global Index	2.2	2.2	-5.9	0.3	-0.2	1.8
HFRI RV: Fixed Income - Corporate Index	1.8	1.8	-1.6	7.8	3.6	3.9
HFRI ED: Distressed/Restructuring Index	1.2	1.2	-4.3	12.4	4.8	4.4
Thomson One Distressed Index	0.0	0.0	-1.2	17.8	9.3	9.4
Real Assets						
FTSE NAREIT All Equity Index	1.7	1.7	-19.4	10.2	6.3	6.5
S&P Developed BMI Property Index	0.5	0.5	-21.5	6.6	0.9	2.7
S&P Developed ex-U.S. Property Index	-2.1	-2.1	-22.7	2.2	-2.6	1.3
NCREIF Property Index	0.0	0.0	0.2	7.8	7.1	8.5
Bloomberg Commodity Index	-5.4	-5.4	-12.5	20.8	5.4	-1.7
Alerian MLP Index	4.1	4.1	14.7	47.1	7.4	0.6
NCREIF Timberland Index	0.0	0.0	9.4	7.5	5.2	5.6
Thomson One Private Real Estate Index	0.0	0.0	-1.8	12.0	8.3	10.2
S&P Real Assets Equity Total Return Index	1.4	1.4	-13.0	13.2	4.3	4.2
Diversifying Strategies						
HFRI Fund of Funds Index	1.6	1.6	-1.1	7.5	3.3	3.3
HFRI Fund Weighted Composite Index	1.2	1.2	-2.1	10.5	4.7	4.4
HFRI FOF: Conservative Index	0.9	0.9	0.8	7.6	3.9	3.4
HFRI Event Driven	1.4	1.4	-2.2	11.7	4.5	4.6
HFRI Relative Value Total Index	1.4	1.4	0.0	7.7	3.6	3.9
HFRI Macro Index	-3.0	-3.0	-0.9	6.9	4.5	2.6
Other						
Consumer Price Index - U.S.	0.9	0.9	4.9	5.2	3.9	2.7
U.S. Dollar Index	-1.0	-1.0	4.3	1.2	2.6	2.1

* For indices that report returns on a lag, 0.0% is utilized for the most recent time period until the actual return data are reported.

City of Grosse Pointe Woods Employees Retirement System

Benchmark Composition Summary

Target Weighted Index

Since Inception	Weight
Russell 1000 Index	15.00%
Russell Midcap Index	4.00%
Russell 2000 Index	6.00%
MSCI EAFE Index	10.00%
MSCI Small Cap EAFE Index	5.00%
MSCI Emerging Markets Index	12.00%
Bloomberg U.S. Aggregate Index	20.00%
HFRI Equity Hedge Index	5.00%
U.S. 91-Day Treasury Bills	1.00%
Bloomberg Commodity Index	3.00%
FTSE NAREIT All Equity Index	3.00%
HFRI FOF: Conservative Index	10.00%
MSCI Frontier Markets Index	3.00%
S&P 500 Energy Sector Index	3.00%

November 30, 2018	Weight
Russell 1000 Index	23.00%
Russell Midcap Index	5.00%
Russell 2000 Index	7.00%
MSCI EAFE Index	10.00%
MSCI Small Cap EAFE Index	5.00%
MSCI Emerging Markets Index	10.00%
Bloomberg U.S. Aggregate Index	20.00%
U.S. 91-Day Treasury Bills	1.00%
Bloomberg Commodity Index	3.00%
FTSE NAREIT All Equity Index	3.00%
HFRI FOF: Conservative Index	10.00%
S&P 500 Energy Sector Index	3.00%

August 31, 2020	Weight
Russell 1000 Index	30.00%
Russell Midcap Index	5.00%
Russell 2000 Index	7.00%
MSCI EAFE Index	10.00%
MSCI Small Cap EAFE Index	5.00%
MSCI Emerging Markets Index	10.00%
Bloomberg U.S. Aggregate Index	20.00%
Alerian MLP Index	3.00%
FTSE NAREIT All Equity Index	3.00%
HFRI FOF: Conservative Index	7.00%

Actuarial Rate

Since Inception	Weight
7.75% Absolute Return	100.00%

August 31, 2020	Weight
7.5% Absolute Return	100.00%

Definitions

Alpha – Measures how well a portfolio performed versus its benchmark after factoring in the amount of risk (as measured by beta) taken. Technically, alpha is the difference between the excess return of a portfolio and the excess return of the benchmark multiplied by beta. Excess return is simply the actual return minus the return of the risk-free asset, U.S. Treasury Bill. A positive alpha indicates the portfolio has performed better than the benchmark on a risk-adjusted basis.

Annual Standard Deviation – A measure of variability in returns. The annual standard deviation measures the dispersion of annual returns around the average annualized return.

Beta – A coefficient measuring a portfolio's relative volatility with respect to its market. Technically, beta is the covariance of a portfolio's return with the benchmark portfolio's return divided by the variance of the benchmark portfolio's return. Thus, a portfolio with a beta greater than 1.00, indicates the portfolio experienced greater volatility than the benchmark, whereas a portfolio with a beta less than 1.00, indicates the portfolio experienced less volatility than the benchmark.

Consumer Price Index – Measures the change in consumer prices, as determined by a monthly survey of the U.S. Bureau of Labor Statistics. CPI components include housing costs, food, transportation and electricity.

Duration – A measure of the price sensitivity of a bond or bond portfolio to a change in interest rates.

Information Ratio – Describes the risk / reward trade-off of alpha and tracking error. Because the formula for calculating information ratio is Alpha divided by Tracking Error, the larger the information ratio, the more attractive the portfolio is from an overall risk return profile.

Max Drawdown – The maximum loss incurred by a portfolio during a specified time period.

R^2 – Also called the coefficient of determination. On the detail page, R^2 measures how much of the variation in the investment manager's returns can be explained by movements in the market (benchmark).

Sharpe Ratio – A risk-adjusted measure calculated using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe ratio, the better the manager's historical risk-adjusted performance.

Tracking Error – A measure that describes the volatility of the expected excess return (alpha) achieved through active management. Since excess return can only be achieved through a portfolio that actively differs from the benchmark, the level of tracking error is indicative of how different the portfolio will perform relative to any given benchmark.

Disclosures

This one on one report was prepared by FEG (also known as Fund Evaluation Group, LLC), a federally registered investment adviser under the Investment Advisers Act of 1940, as amended, providing non-discretionary and discretionary investment advice to its clients on an individual basis. Registration as an investment adviser does not imply a certain level of skill or training. The oral and written communications of an adviser provide you with information about which you determine to hire or retain an adviser. Fund Evaluation Group, LLC, Form ADV can be obtained by written request directed to: Fund Evaluation Group, LLC, 201 East Fifth Street, Suite 1600, Cincinnati, OH 45202 Attention: Compliance Department.

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Performance results are calculated using information provided by the custodian and/ or independent pricing sources. It is the responsibility of the trustee, custodian and /or manager to ensure the accuracy of market value and transactional data. Performance analysis is calculated using monthly and/or quarterly market values. Performance analysis and asset valuations may or may not include accrued interest and dividend income and are net of management fees. FEG/Consulting fees may or may not be deducted, based on client preference.

FEG's universes are updated monthly and the traditional asset classes are constructed from Lipper data feeds encompassing over 19,000 mutual funds. Lipper classifies approximately 50 asset classes according to the funds' investment objectives and portfolio attributes. FEG screens the Lipper universes to include only institutional and no-load funds. However, because the Lipper data may treat multiple share classes of the same fund as separate funds for the purposes of constructing their universes, FEG further screens the universes to eliminate multiple share classes within the institutional and no-load funds (examples include retirement-share classes and 529-share classes) in an effort to present pure-institutional universes.

Monitoring of managers includes fundamental research for all investment managers, as well as enhanced coverage for managers that have been approved for FEG's recommended list. A Quarterly Content Questionnaire is the basis of fundamental coverage and requests qualitative (e.g., personnel, organizational changes) and quantitative information (performance, cash flows) on all investment strategies for ongoing monitoring and adherence to investment policy. Clients may have exposure to both fundamental and recommended managers in their portfolio depending on their unique needs. FEG conducts conference calls directly with the active managers that receive enhanced coverage.

Mutual funds are bound by their prospectus, limiting potential deviation from the stated investment strategy.
Clients are encouraged to contact their Investment Advisers immediately if there are changes to their financial situation or investment objectives, or if they wish to impose or modify restrictions on the management of their account(s). Please notify your adviser immediately if you believe that any information on file is incorrect, or have had changes that have not been previously discussed.

Index performance results do not represent any managed portfolio returns. An investor cannot invest directly in a presented index, as an investment vehicle replicating an index would be required. An index does not charge management fees or brokerage expenses, and no such fees or expenses were deducted from the performance shown.

This report is prepared for informational purposes only. Past performance is not indicative of future results.

FEG investment advisors

FEG MEMORANDUM

TO: City of Grosse Pointe Woods Pension Board

FROM: FEG

SUBJECT: Portfolio Rebalancing to Fixed Income Strategic Target

DATE: May 4, 2023

Rationale:

Since late 2021, the Fed has carried out its most aggressive tightening campaign in 40 years in a bid to restore price stability and tame inflation. These tightening measures—including a 5% policy rate, ongoing quantitative tightening through an approximately $100 billion per month reduction in the size of the Fed's balance sheet, and a dramatic reduction in banking system liquidity—have helped to drive a sharp increase in financial market volatility. Global interest rates have reset higher providing a more attractive long-term return profile. Inflation remains elevated, and the Federal Reserve (Fed) persists in its fight to bring inflation down to more economically sustainable levels, which means tightening liquidity, reducing demand, and hampering economic growth. Many measures that historically signaled recession indicate negative readings or deteriorating conditions. Although some areas are weak, the labor market and measures of credit stress remain strong. Not every recession perfectly reflects its predecessors, and recessionary conditions may exist without all the typical measures indicating an economic decline. With this economic backdrop in mind, FEG is proposing bringing the fixed income allocation closer to the target established in the City of Grosse Pointe Woods Investment Policy Statement.

The schedules below provide a before and after snapshot along with the transactions that will execute the portfolio rebalancing (based on March 31, 2023 market values):

Exhibit 1:
Strategic Allocation Before Rebalancing:

	Current Weight	Target Weight
Large Cap Equity	31.3%	30.0%
Mid Cap Equity	5.0%	5.0%
Small Cap Equity	7.4%	7.0%
International Equity	9.9%	10.0%
International Small Cap Equity	4.9%	5.0%
Emerging Markets	9.4%	10.0%
Fixed Income	16.1%	20.0%
Public Real Estate	2.1%	3.0%
Public Natural Resources	5.4%	3.0%
Low Volatility (Diversifying Strategies)	7.4%	7.0%
Cash	1.0%	0.0%
	100.00%	100.0%

Exhibit 2:

Transactions:		Ticker:	$ Amount:	% of Plan:
Sell	iShares S&P 500 Index	IVV	(415,000)	1.0%
Sell	iShares Russell Mid Cap Index	IWR	(210,000)	0.5%
Sell	Vanguard S&P 600 Index	VIOO	(210,000)	0.5%
Sell	Tortoise MLP and Pipeline Fund	TORIX	(415,000)	1.0%
Buy	Vanguard Total Bond Fund	VBTLX	415,000	1.0%
Buy	Dodge & Cox Income	DODIX	415,000	1.0%
Buy	DoubleLine Total Return Bond Fund	DBLTX	415,000	1.0%

Exhibit 3:
Strategic Allocation After Rebalancing:

	After Rebalancing	Target Weight
Large Cap Equity	30.3%	30.0%
Mid Cap Equity	4.5%	5.0%
Small Cap Equity	6.9%	7.0%
International Equity	9.9%	10.0%
International Small Cap Equity	4.9%	5.0%
Emerging Markets	9.4%	10.0%
Fixed Income	19.1%	20.0%
Public Real Estate	2.1%	3.0%
Public Natural Resources	4.4%	3.0%
Low Volatility (Diversifying Strategies)	7.4%	7.0%
Cash	1.0%	0.0%
	100.0%	100.0%

ARE WE THERE YET?

The Road to Recession

First Quarter 2023

Inflation remains elevated, and the Federal Reserve (Fed) persists in its fight to bring inflation down to more economically sustainable levels, which means tightening liquidity, reducing demand, and hampering economic growth.

Since inflation started its ascent in 2021, investors have been fraught over the ramifications. In 2022, with inflation reaching 40-year highs and the Fed's aggressive and arguably late response, investors watched the yield curve invert, which historically signals recession.

Although 2022 witnessed the often-used technical definition of a recession – two quarters of negative growth – the economic environment was not sufficiently weak enough for the National Bureau of Economic Research (NBER) to label those quarters as a recession.

The labor market remains strong, presenting an ongoing inflationary risk to the Fed's efforts. Despite easing supply chains and inflation subsiding from last year's peak, inflation remains well above the Fed's goal and is persistently sticky in many economic sectors. Halting inflation's ascent was one challenge, but bringing inflation back to desired levels may be more difficult.

The Fed's tools are blunt; tamping down inflation without a recession is difficult. Whether a soft landing, mild recession, or deep recession arrives remains to be seen, but we are at a point where the road ahead presents obstacles to economic growth. However, that often means opportunities for investors.

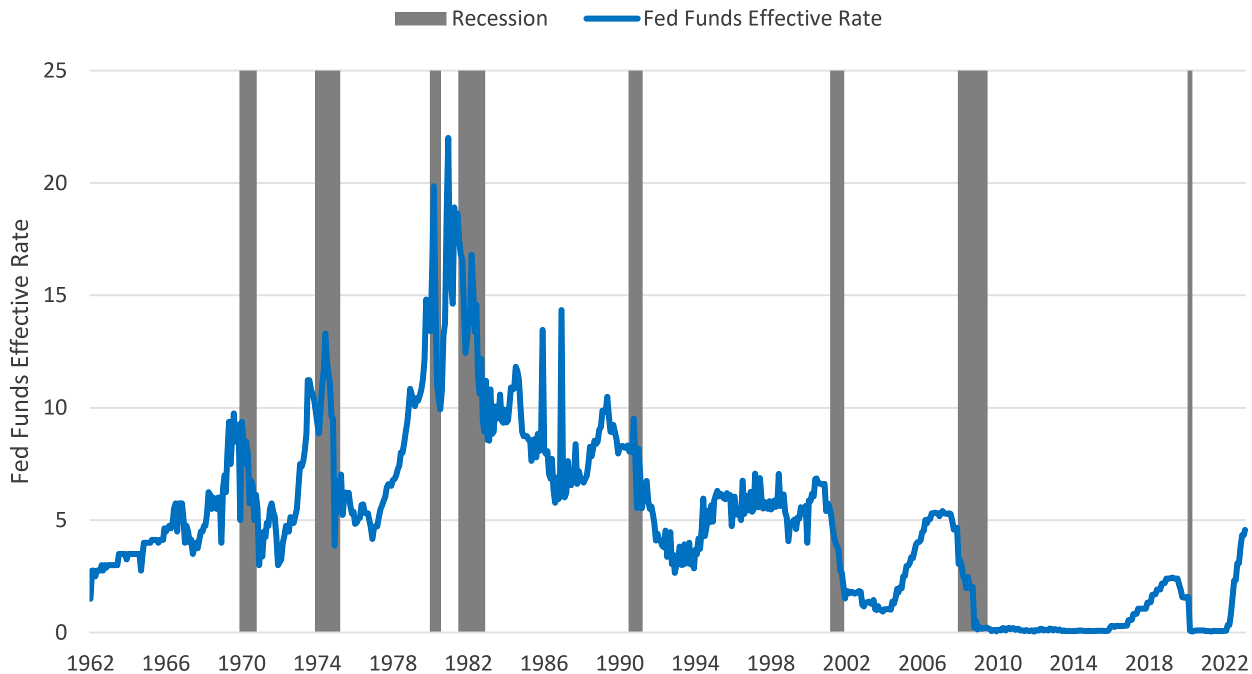
Contents

The Fed Has a History of Triggering Recession

- The Fed's rate hikes, which increase the cost of capital used for business investment, consumer borrowing, etc., have a lagged effect due to the time necessary for the impact of rate hikes to move through the economy.
- The Fed's steering of the economy is imprecise. Even if bringing a halt to economic growth to tamp down inflation is their goal, the nature of tightening presents the risk of constraining economic growth to a more significant degree than desired.

THE FED'S ABILITY TO TRIGGER RECESSION IS CLEAR

U.S. Federal Funds Effective Rate and Recessions



Data sources: U.S. Federal Reserve, NBER, and FactSet

HOW FAR HAVE WE COME?

Many Recessionary Signals

- Many measures that historically signaled recession indicate negative readings or deteriorating conditions.
- Although some areas are weak, the labor market and measures of credit stress remain strong.
- Not every recession perfectly reflects its predecessors, and recessionary conditions may exist without all the typical measures indicating an economic decline.

MOST ECONOMIC INDICATORS ARE SIGNALING NEGATIVE AND DETERIORATING CONDITIONS

U.S. Business Cycle Monitor, as of March 24, 2023

ECONOMIC INDICATOR	INPUT TRACKED	CURRENT	AS OF	LEVEL	TREND	RECESSIONARY SIGNAL	IMPLIED CYCLICAL BIAS
Slope of Treasury Yield Curve	U.S. Treasury 10Yr - 3Mo Term Slope	**-131 bps**	**3/24/2023**	**NEGATIVE**	**DETERIORATING**	Numerous curve inversions followed by bull steepener alongside Fed easing	EARLY MID LATE
Leading Economic Indicators	Conference Board *Leading Economic Index (LEI)* Growth (YoY)	**-6.5%**	**Feb-23**	**NEGATIVE**	**DETERIORATING**	Consecutive negative growth readings below -2%	EARLY MID LATE
Consumer Sentiment	U. of Michigan Consumer Sentiment Index	**63.4**	**Mar-23**	**NEGATIVE**	**DETERIORATING**	Below-trend growth	EARLY MID LATE
Industrial Production	Federal Reserve Industrial Production Growth (YoY)	**-0.3%**	**Feb-23**	**NEGATIVE**	**STABLE**	Consecutive negative growth readings below -5%	EARLY MID LATE
High Yield Credit Spreads	Bloomberg U.S. High Yield Index Option-Adjusted Spread (OAS)	**516 bps**	**3/24/2023**	**NEUTRAL**	**STABLE**	OAS of at least 800 bps	EARLY MID LATE
Manufacturing Health	ISM Manufacturing Purchasing Manager Index (PMI)	**47.7**	**Feb-23**	**NEGATIVE**	**DETERIORATING**	Sub-50 index reading	EARLY MID LATE
Unemployment	BLS Headline Unemployment Rate (U-3)	**3.6%**	**Feb-23**	**POSITIVE**	**STABLE**	Convergence with 3-year avg. following multi-year period of improvement	EARLY MID LATE
Labor Market Fundamentals (Broad)	Conference Board *Employment Trends Index (ETI)* Growth (YoY)	**-0.5%**	**Feb-23**	**NEGATIVE**	**DETERIORATING**	Consecutive negative growth readings below -2%	EARLY MID LATE
ESTIMATED POINT IN CYCLE	FEG U.S. Business Cycle Composite	-	**3/24/2023**	**NEGATIVE**	**DETERIORATING**	-	EARLY MID LATE

= Rececessionary signal met

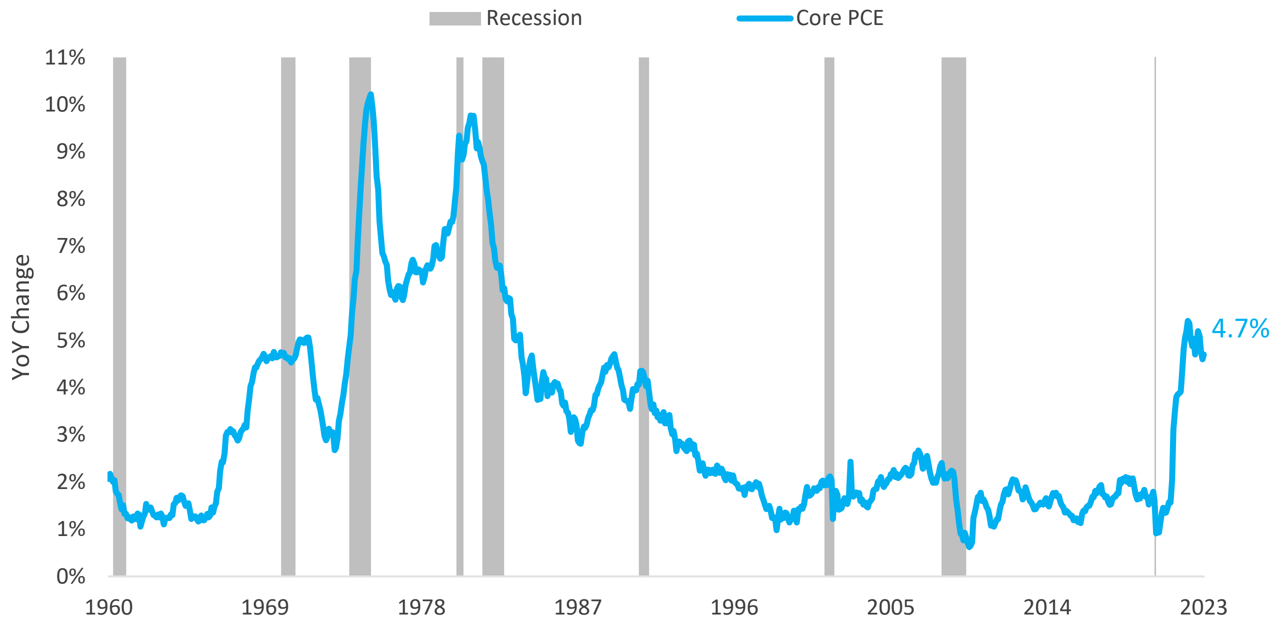
Data sources: Conference Board, Bureau of Labor Statistics, ISM, Bloomberg L.P., FEG

The Spike in Inflation Has Eased

- The Fed was arguably slow to react to rising inflationary pressures as the COVID-19 pandemic's supply shock triggered rising prices, and fiscal stimulus aided businesses and consumers.
- The Fed's delayed but rapid action appears to have halted the continued escalation of core inflation, but halting inflation's ascent was only the first step.
- Inflation is becoming sticky, persisting in many economic sectors, and returning inflation to more amenable levels may prove more challenging than halting inflation's ascent.

THE FED'S PREFERRED INFLATION GAUGE HAS EASED BUT NEEDS TO FALL FURTHER

U.S. Core PCE Inflation, Year-over-Year Percentage Change



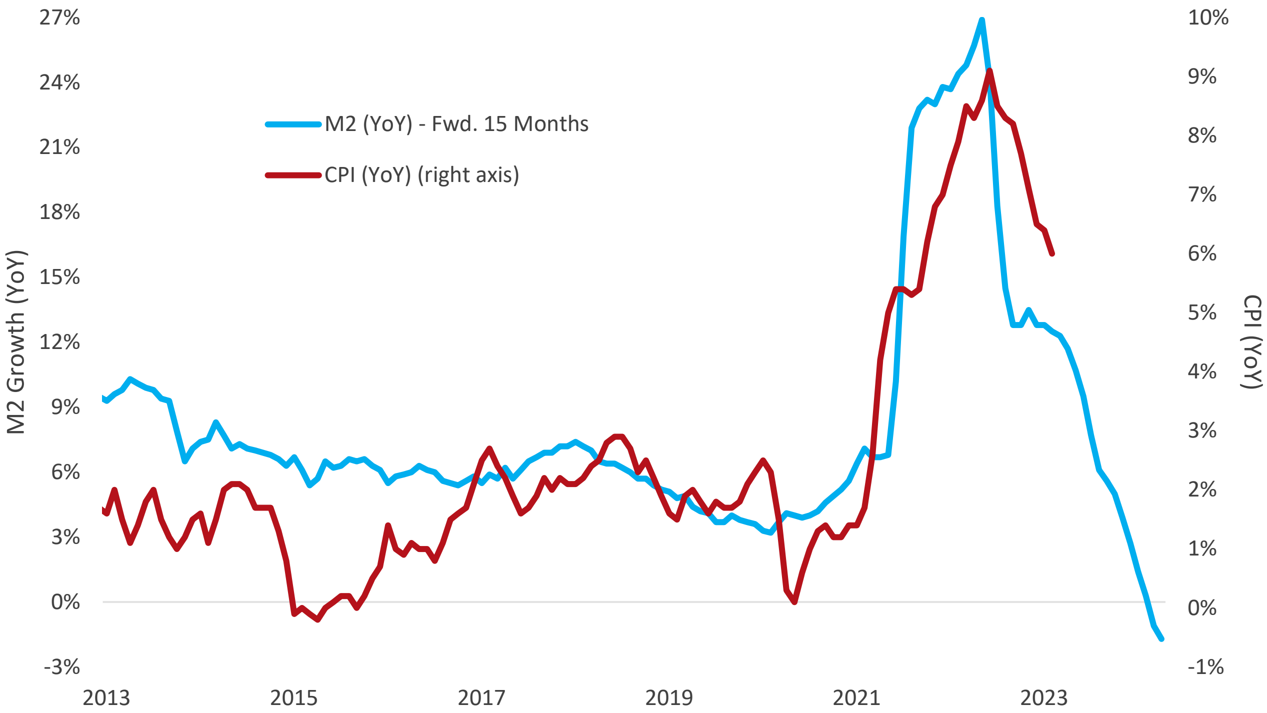
Data sources: BEA, NBER, Bloomberg, L.P., Data as of February 2023

The Money Supply is Finally Declining

- Liquidity conditions had been declining amid tightening by the Fed to constrain inflation, which creates recessionary pressures on the economy as the cost of capital increases. Although, recent conditions have been somewhat looser due to activity by the U.S. Treasury.
- The sharp decline in the money supply growth rate indicates changing monetary conditions that may help push inflation to lower levels.

MONEY SUPPLY HAS BEEN CONTRACTING

M2 Money Growth (forward 15 months) vs. CPI (year-over-year)



Data sources: Federal Reserve, Bloomberg, L.P.; M2 data as of January 2023 and CPI data as of February 2023

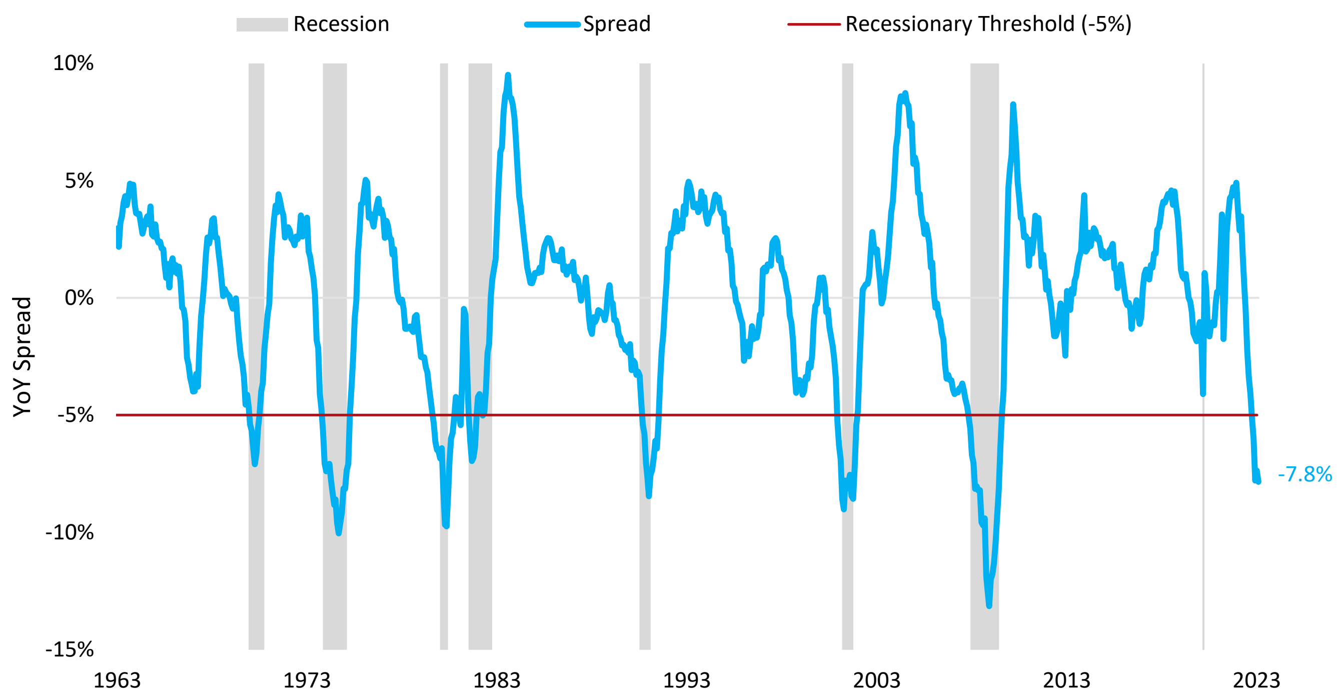
THE ROAD AHEAD

Leading Economic Indicators Signal Recession

- Leading economic indicators have been on a substantially negative trend in recent months.
- Coincident indicators, which reflect the economy's current status, have also been declining, but the pace of decline in leading indicators hints that more economic weakness is likely.
- Historically, a recession has not been avoided from these levels, yet growth estimates remain robust. The Atlanta Fed GDPNow forecasted 2.5% growth for the first quarter of 2023 as of March 31.

LEADING INDICATORS DETERIORATE MORE THAN COINCIDENT INDICATORS

Growth Rate Spread Between Leading and Coincident Indicators, as of February 2023



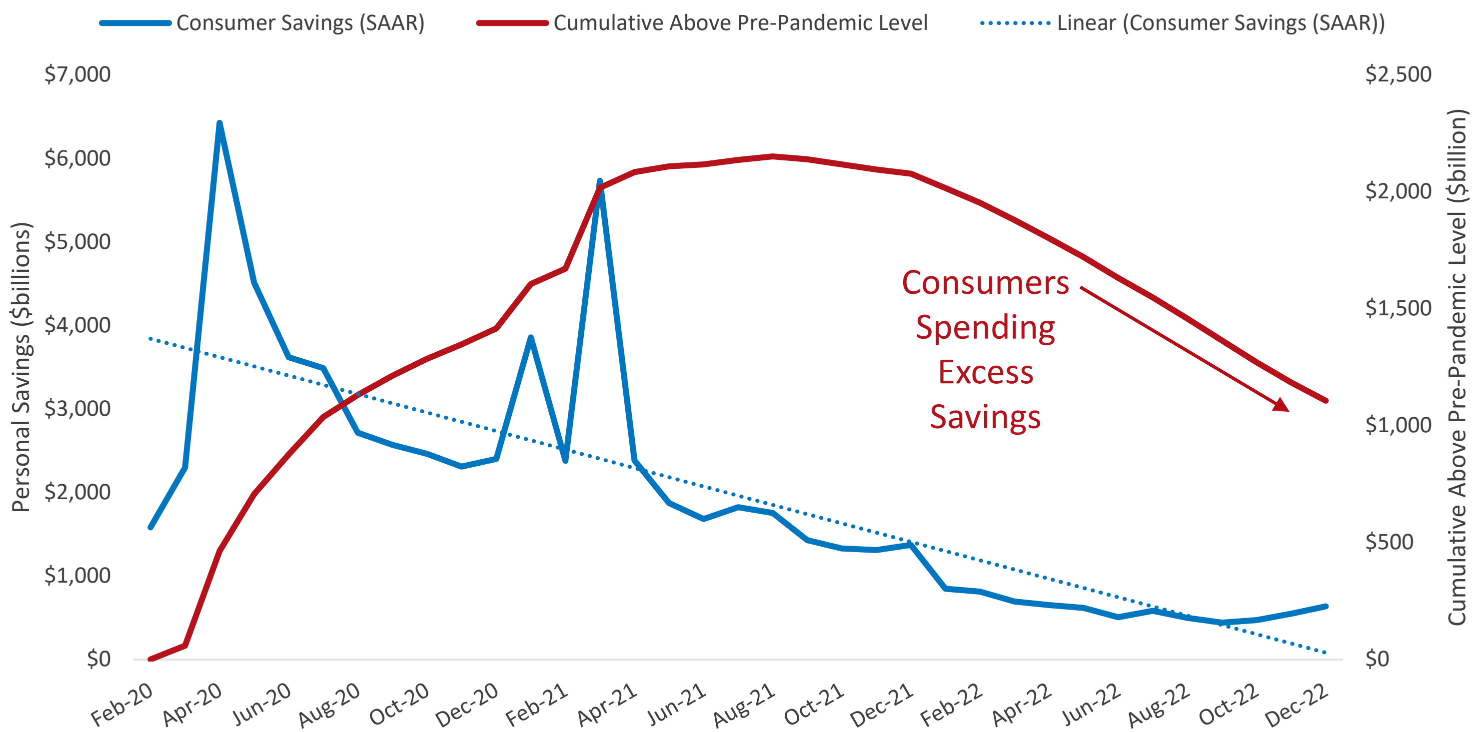
Data sources: Conference Board, Bloomberg, L.P.

Consumers Have Been Spending Down Excess Savings

- The pandemic-related stimulus benefits and limited travel and social activities led to substantial consumer savings.
- Consumers are now spending down those savings, helping to buoy the economy, but the cumulative excess savings since the start of the pandemic are now half of what they were and declining as credit growth has surged despite higher borrowing costs.

CONSUMERS ARE USING SAVINGS TO KEEP SPENDING

Personal (Consumer) Savings and Cumulative Savings above February 2020, Seasonally-Adjusted Annual Rate



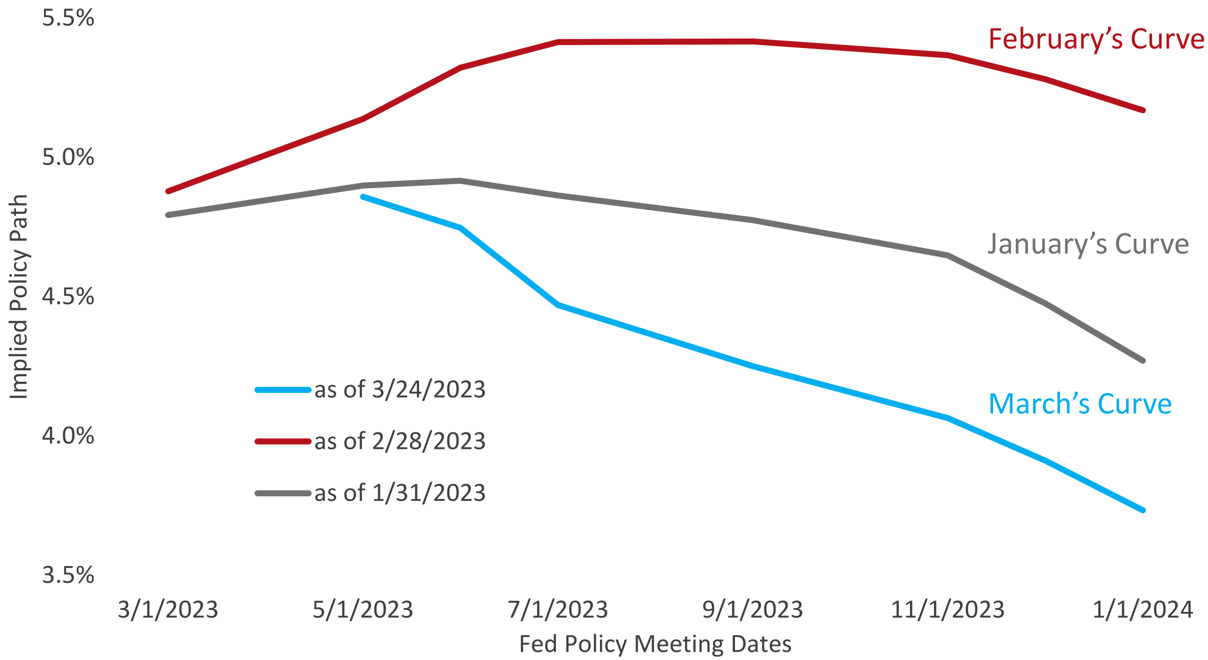
Data sources: Federal Reserve Bank of St. Louis and Strategas

The Market Wants the Trip to End

- To start 2023, equity markets rallied amid expectations that peaking inflation may result in a less hawkish Fed and an easing of monetary conditions later this year.
- Fed Chair, Jerome Powell, has consistently communicated that the Fed will not ease until inflationary pressures subside, which had resulted in an elevated implied Fed policy path.
- Market expectations of the Fed's path recently softened amid concerns stemming from the banking crisis that started with Silicon Valley Bank's (SVB) failure.

THE IMPLIED PATH OF FED POLICY RATES SOFTENED WITH THE SVB CRISIS

Implied Fed Policy Path (Based on Fed Funds Futures as of 3/24/2023)



The Market Sees a Need for the Fed to be Less Hawkish

Data sources: Federal Reserve, Bloomberg L.P.

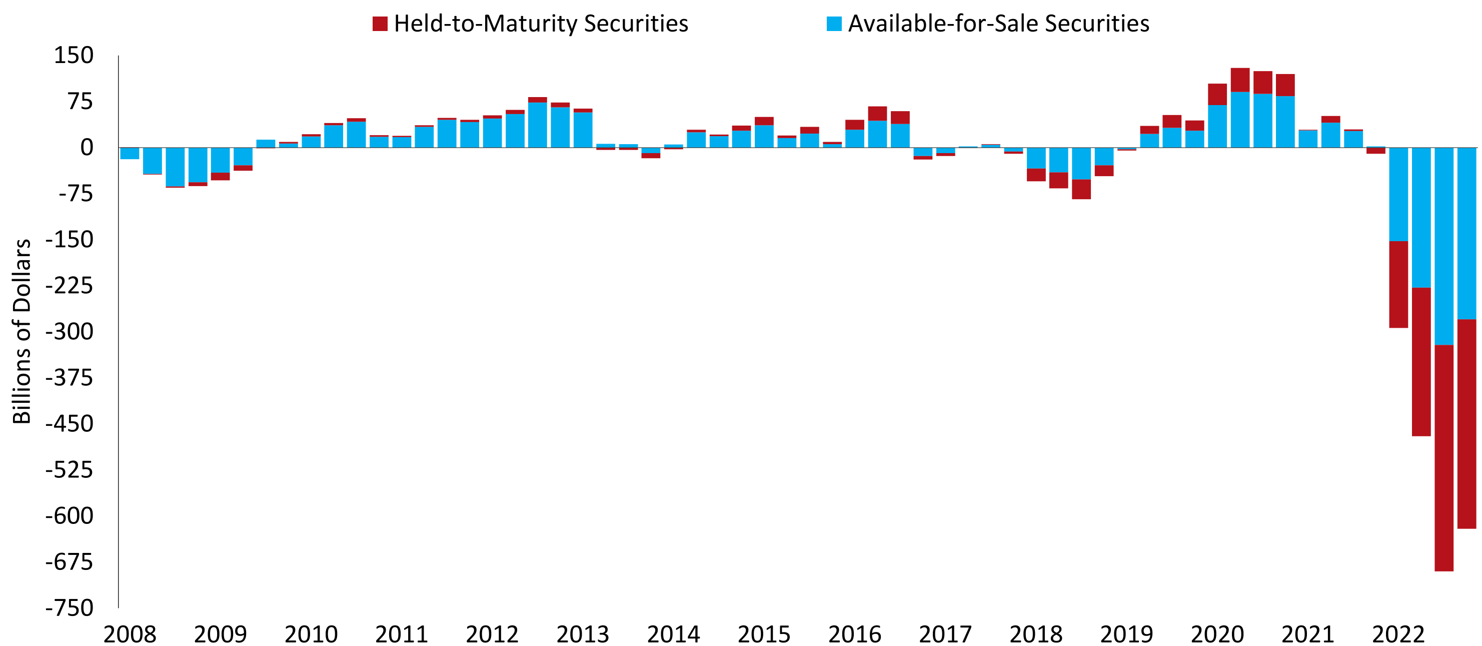
DOES THE BANKING CRISIS ACCELERATE A RECESSION'S ARRIVAL

The Stress in the Banking System

- The banking crisis spurred by SVB's failure in early March illustrated the risk of poorly managed assets negatively impacted by rising rates.
- The SVB and Signature Bank failures led the Fed and the Federal Deposit Insurance Corporation (FDIC) to guarantee deposits and provide a new lending facility for liquidity.
- The current crisis does not appear as systemically troubling as the Great Financial Crisis (GFC), when banks were substantially less capitalized and bank assets' credit quality deteriorated, but other small banks may face liquidity issues.

BANKS ARE SITTING ON SUBSTANTIAL PORTFOLIO LOSSES DUE TO RATE CHANGES, NOT CREDIT QUALITY

Unrealized Gains and Losses on Investment Securities for U.S. Banks



Data source: FDIC

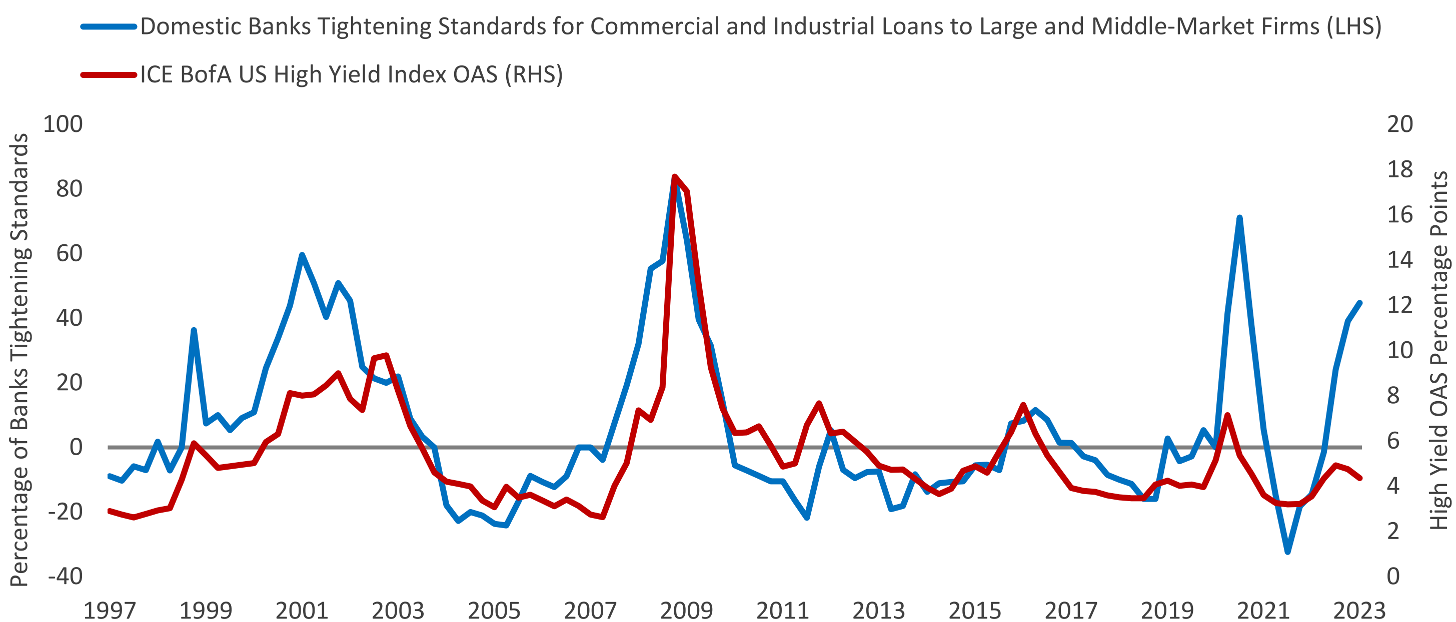
Available-for-sale securities are marked to market value, but held-to-maturity securities, are not and cannot be hedged according to accounting rules.

Tightening Lending Standards May Weigh on the Economy

- Banks were already tightening lending standards before the recent banking crisis, but current events are likely to pressure small and mid-sized banks to tighten lending standards further to preserve liquidity.
- Bank financing supports consumers making large purchases and small businesses wishing to grow, so tighter standards are expected to affect economic growth.
- High yield credit markets, however, have yet to reflect tighter standards, and spreads over Treasuries remain compressed.

BANKS HAVE BEEN TIGHTENING LENDING STANDARDS

Banks Tightening Standards for Commercial and Industrial Loans and High Yield Option-Adjusted Spread



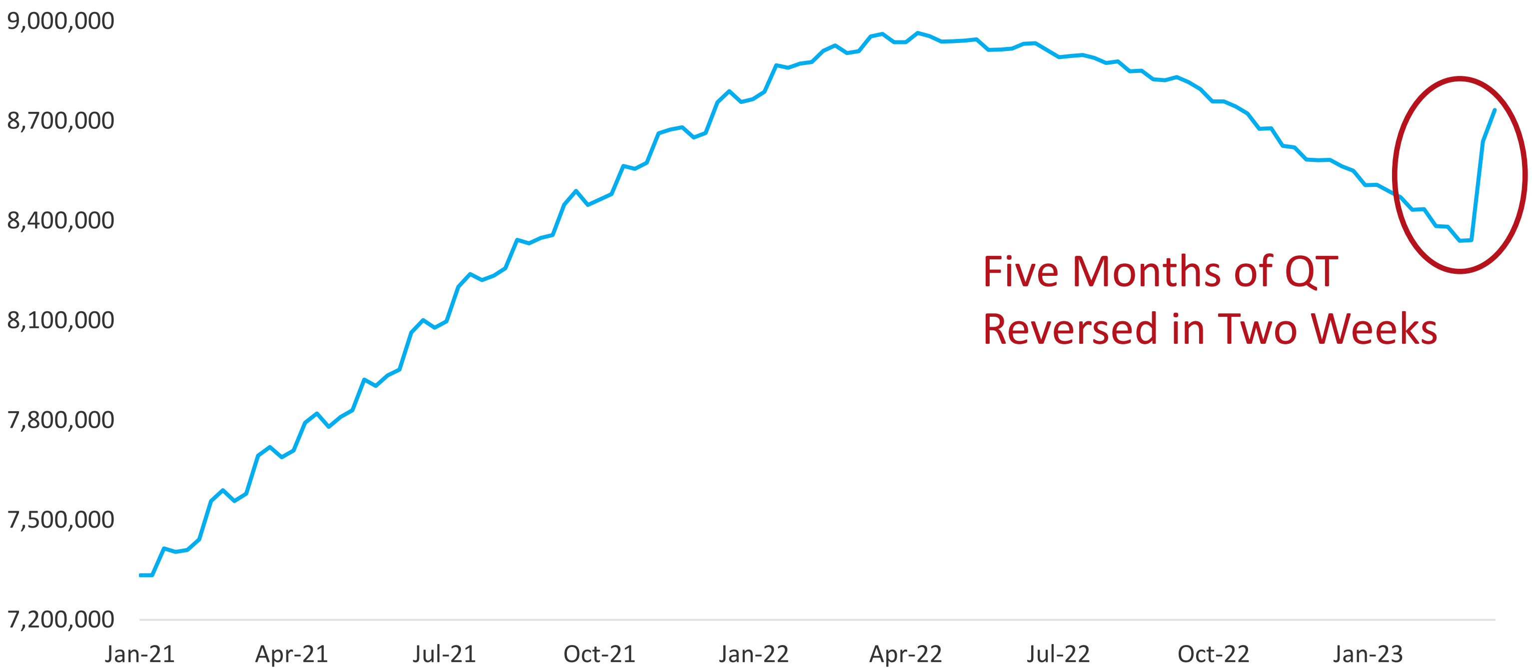
Data sources: St. Louis Federal Reserve and FactSet

The Fed's Balance Sheet Reverses Course

- Several regional banks faced increased withdrawals, which led to a jump in borrowing at the Fed's discount window and a spike in the Fed's balance sheet.
- This was not a reversal in the Fed's plans to reduce the size of its balance sheet through quantitative tightening (QT) in favor of quantitative easing (QE) to stimulate growth. Instead, it reflects a hurdle in QT to alleviate the pressures on the banking industry.

THE BANKING CRISIS PAUSES QUANTITATIVE TIGHTENING

U.S. Federal Reserve Total Assets (Less Eliminations from Consolidation)



Data sources: St. Louis Federal Reserve, Data as of March 22, 2023

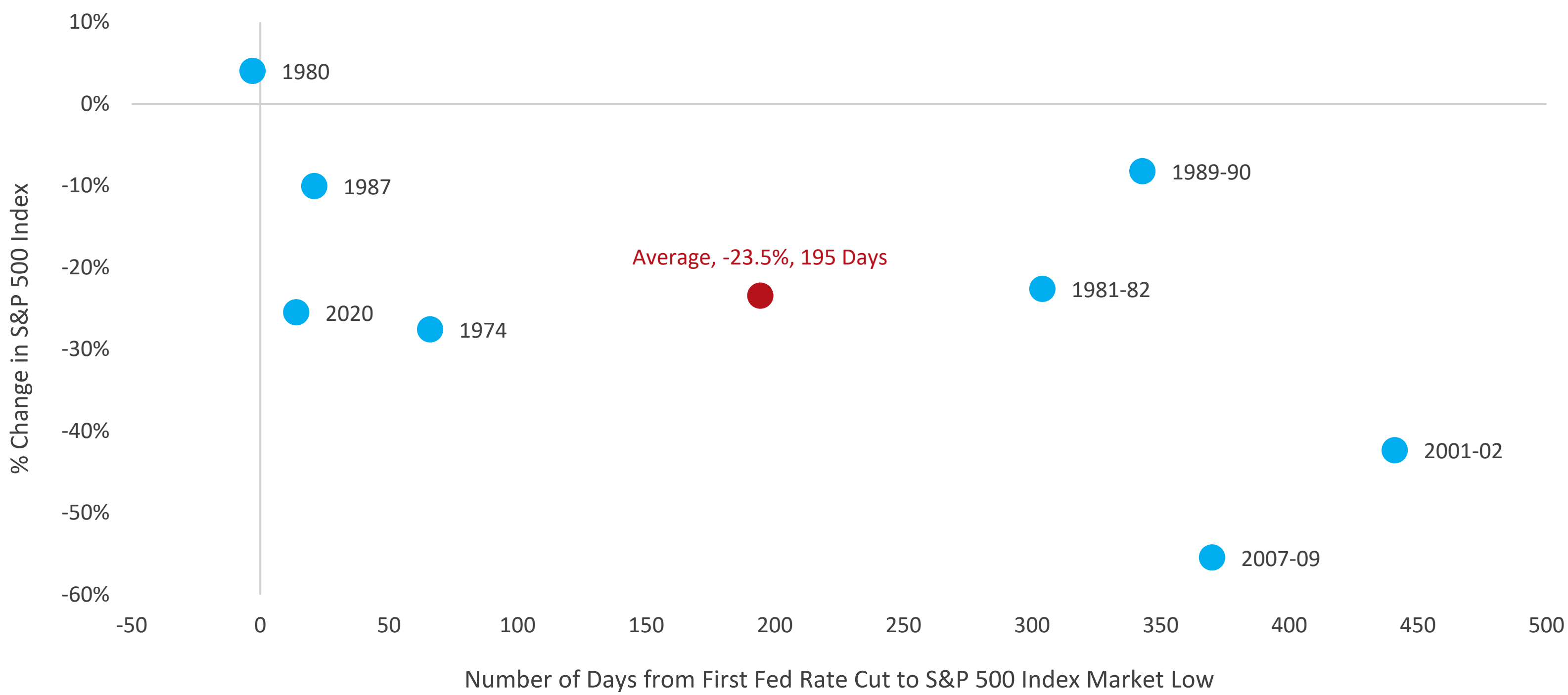
A LOOK IN THE REAR-VIEW MIRROR

How the Market Responds to Rate Cuts

- Historically, after the Fed's first rate cut, as investors assess the severity of economic weakness that has prompted the Fed to begin easing, equity markets have witnessed continued declines.
- The Fed has historically begun cutting its target rate as the economy is in or entering a recession, and the Fed believes that easier monetary policy is necessary.
- During the Fed's pause from the last rate hike to the first rate cut, history has shown both strongly positive and negative returns.

THE MARKET HISTORICALLY ASSESSES DAMAGE EVEN AFTER THE FIRST RATE CUT

Trading Days from First Fed Rate Cut to S&P 500 Index Market Low vs. S&P 500 Index Change Over the Same Period



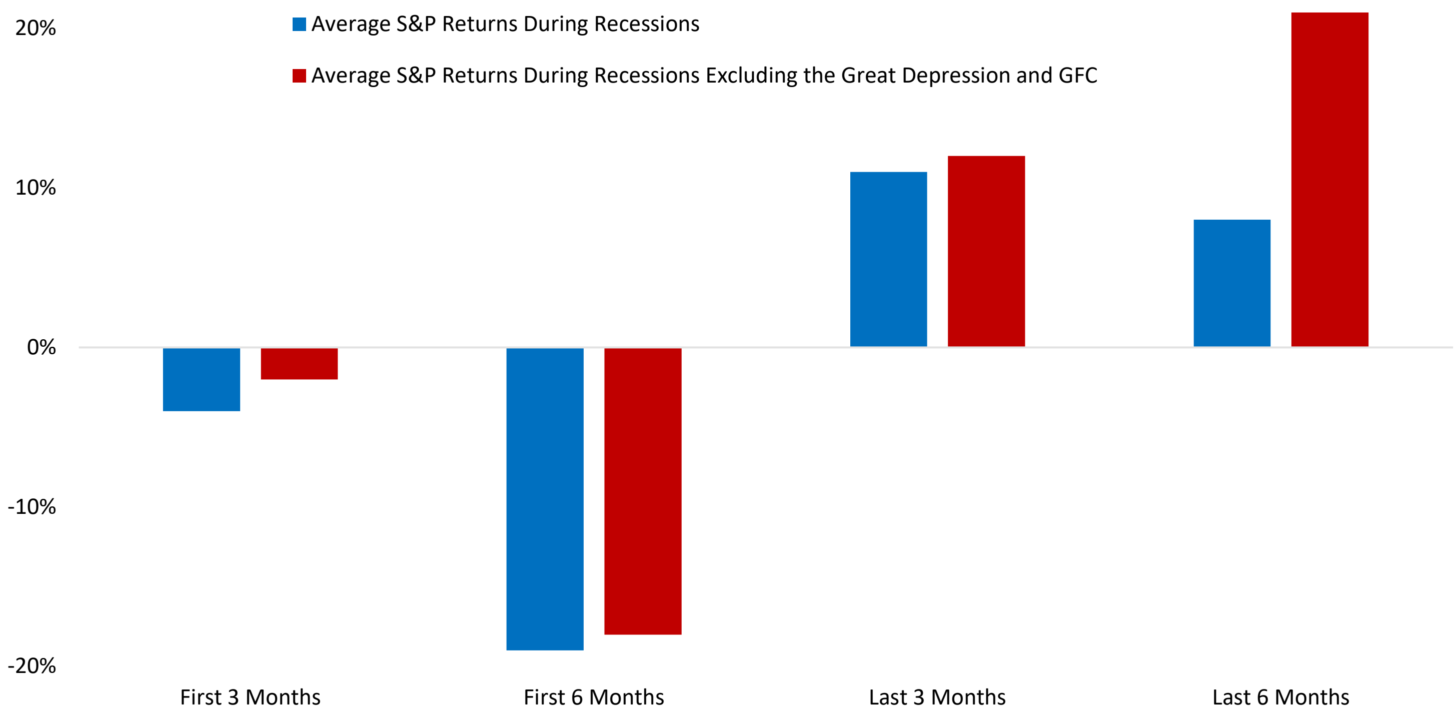
Data source: Strategas

The Market Improves When News is Less Bad

- Not only do markets tend to fall before a recession begins, but markets also tend to recover well before a recession ends.
- Markets bottom when the news that triggers a recession becomes “less bad news” as opposed to good news.

EQUITIES PERFORM WELL THROUGHOUT THE LAST THREE MONTHS AND SIX MONTHS OF RECESSION

U.S. Recessions First Months and Last Month



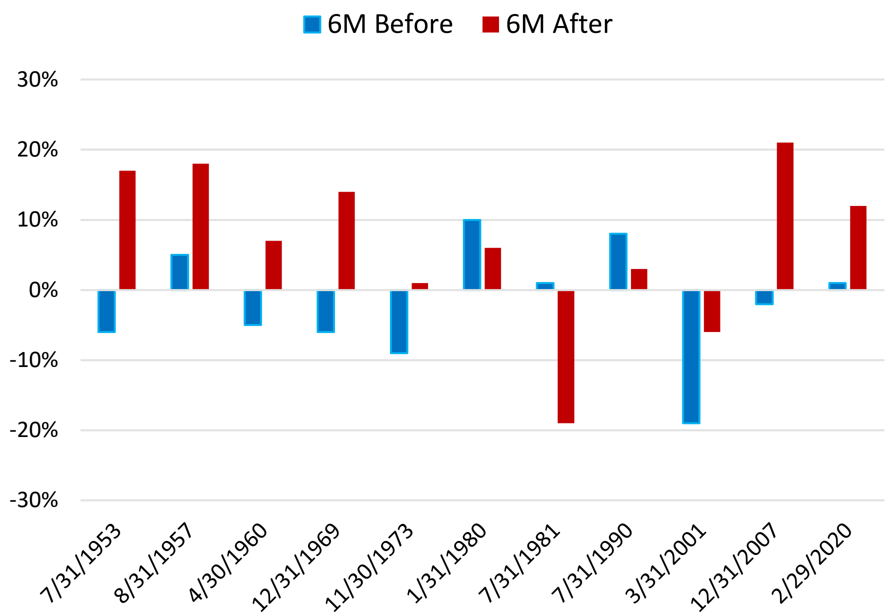
Data sources: Strategas and Standard & Poor’s

Market Performance Around a Recession

- Historically, much as the market decline is gradual, the market recovery is also gradual.
- Performance six months after a recession is typically positive but varies in degree. Performance in the two years following a recession has been materially more robust, with average returns measuring approximately 20%, meaning investors should not worry about missing the initial rally.

EQUITIES ARE GENERALLY DOWN BEFORE A RECESSION AND HAVE GAINED 82% OF THE TIME SIX MONTHS AFTER

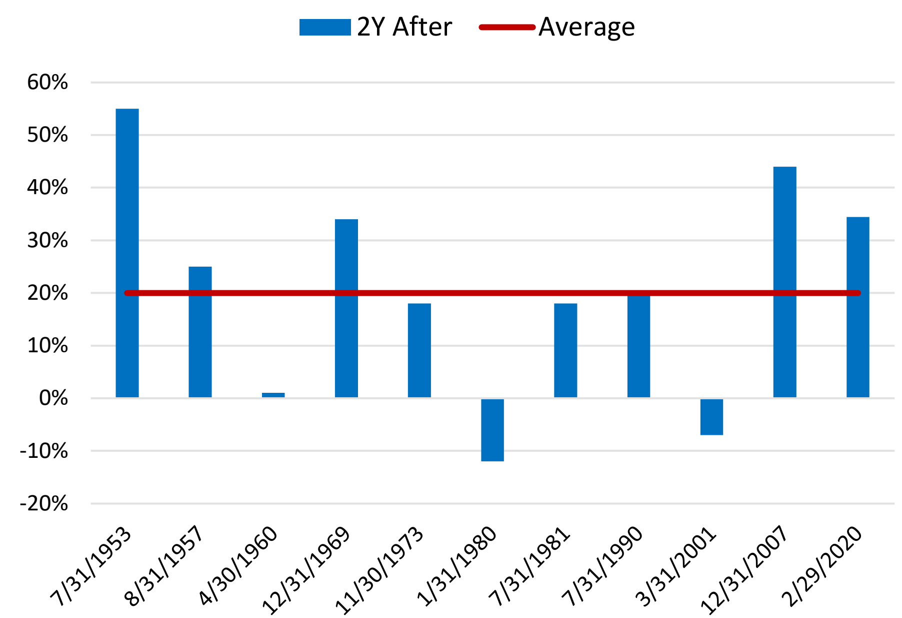
S&P 500 Index Performance Six Months Before and After Recession



Data sources: National Bureau of Economic Research, Standard & Poor's, Darrow Wealth Management

AVERAGE EQUITY GAINS ARE STRONGEST TWO YEARS AFTER RECESSION

S&P 500 Index Performance Two Years Following Recession



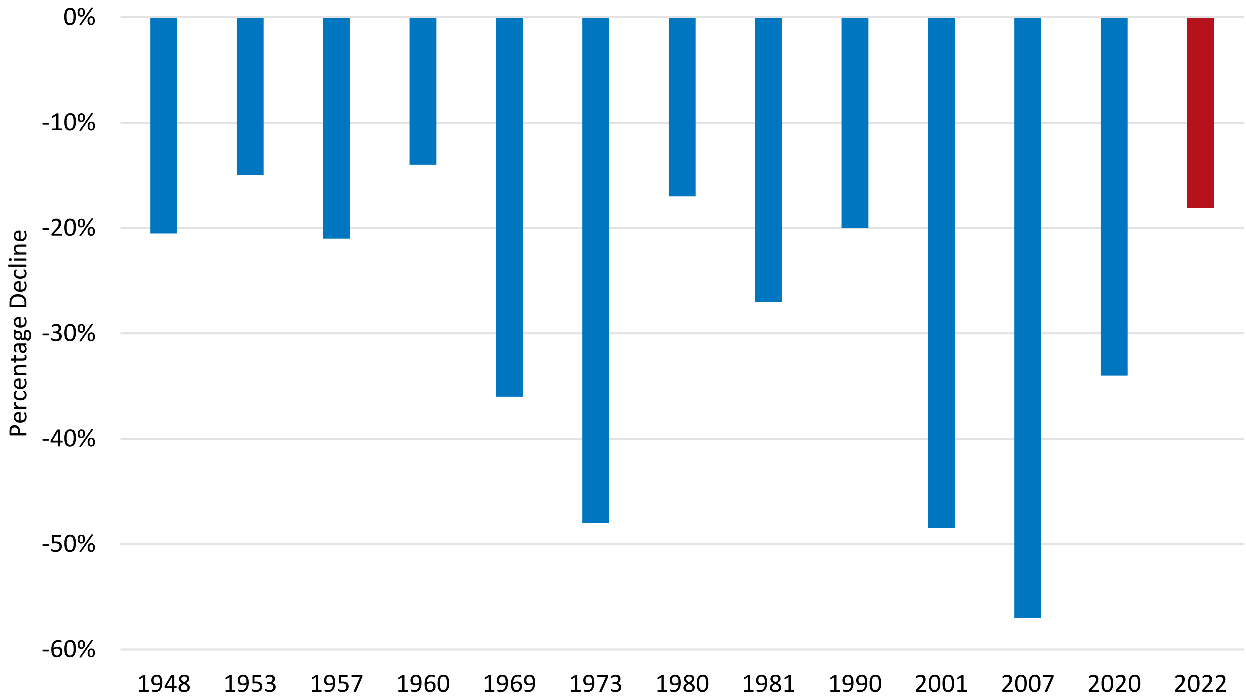
Data sources: National Bureau of Economic Research, Standard & Poor's, Darrow Wealth Management

Not All Recessionary Drawdowns are Equal

- Although bear markets during a recession have historically included market declines over 20%, not all recessions include such dramatic market drops.
- The 2022 S&P 500 Index's decline was similar to less damaging recessions but was largely driven by high valuations, elevated inflation, and rising rates.
- The risk of further deterioration with a recession is evident, but if a recession is avoided, additional significant declines could be limited.

THE CURRENT MARKET RESEMBLES LESS DAMAGING RECESSIONARY DECLINES

S&P 500 Index Peak to Trough Drawdowns, Blue Bars are Recession by First Year, Red Bar is CY 2022



Data sources: Bloomberg, J.P. Morgan Asset Management; Data as of January 2023

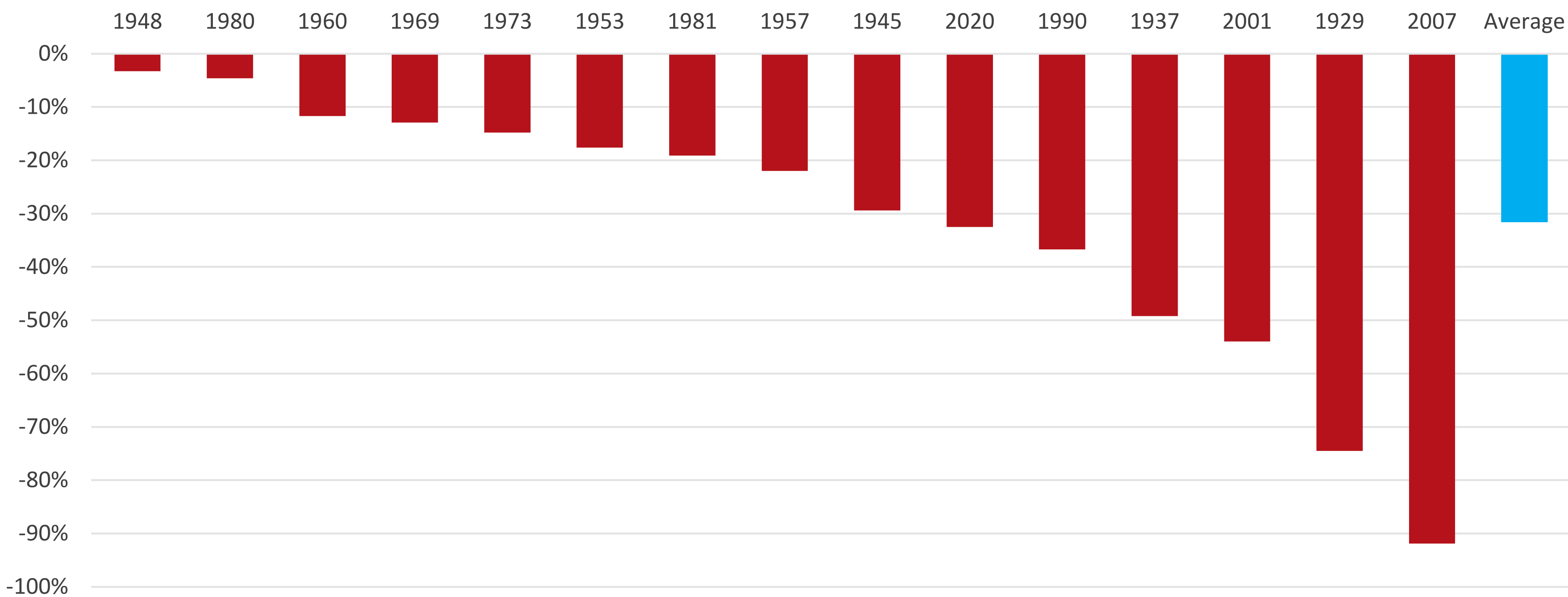
EARNINGS FOLLOW

Earnings are Likely to Decline if a Recession Develops

- If a recession develops, earnings will likely decline further from post-pandemic highs.
- The median earnings decline during a recession is 22%, and the average is over 30%.
- The four recessions since and including the 1990 recession, all witnessed earnings declines in excess of the -30% average.

EARNINGS TYPICALLY FALL AT LEAST 10% TO 20% DURING RECESSIONS

S&P 500 Index Reported Earnings Declines During Recessions



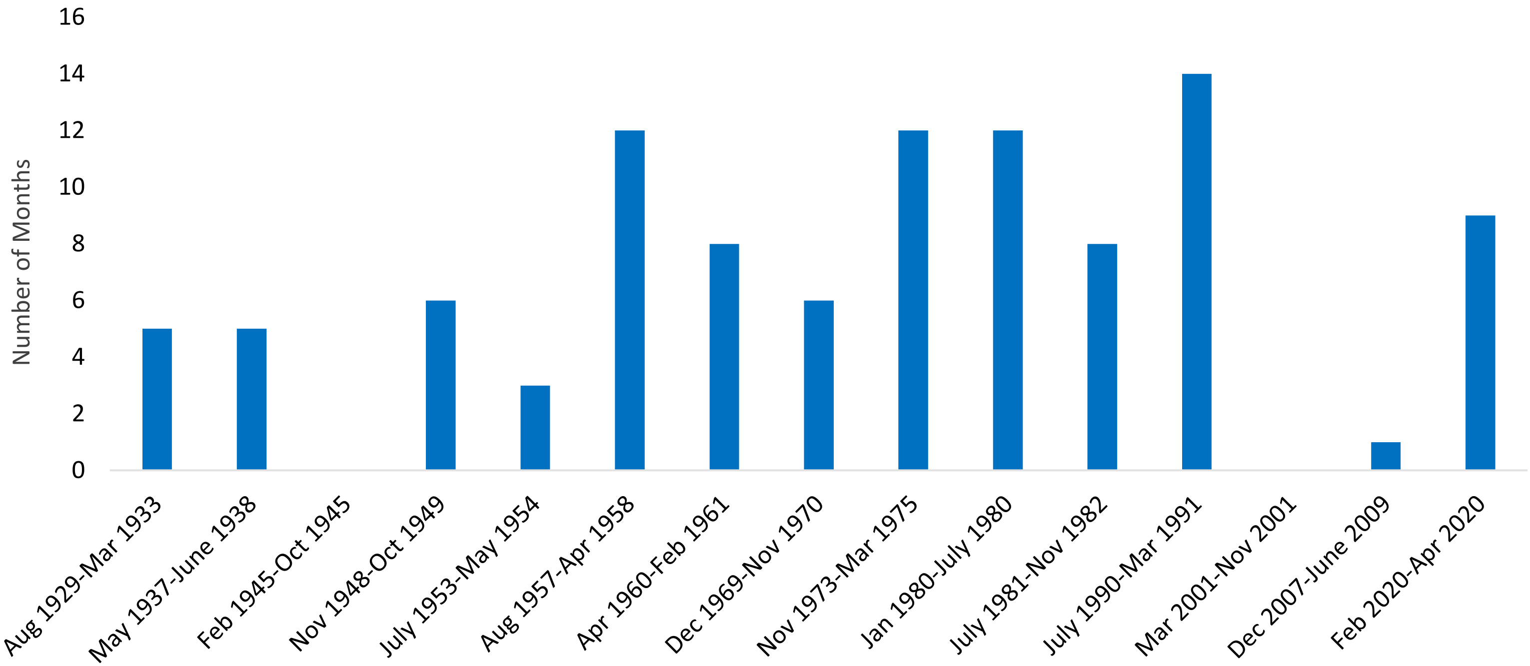
Data source: Strategas

Earnings are a Lagged Indicator

- Equity earnings reflect weakness with a lag, as earnings result from revenue and expenses in prior periods.
- Markets typically trough well before the low point in earnings occurs.

THE TROUGH IN EARNINGS IS TYPICALLY SEVERAL MONTHS AFTER EQUITY PRICES STOP FALLING

Number of Months Between the Trough in the S&P 500 Index Price vs. the Trough in Earnings



Note: Markets declined further after earnings trough in 1945 and 2001.

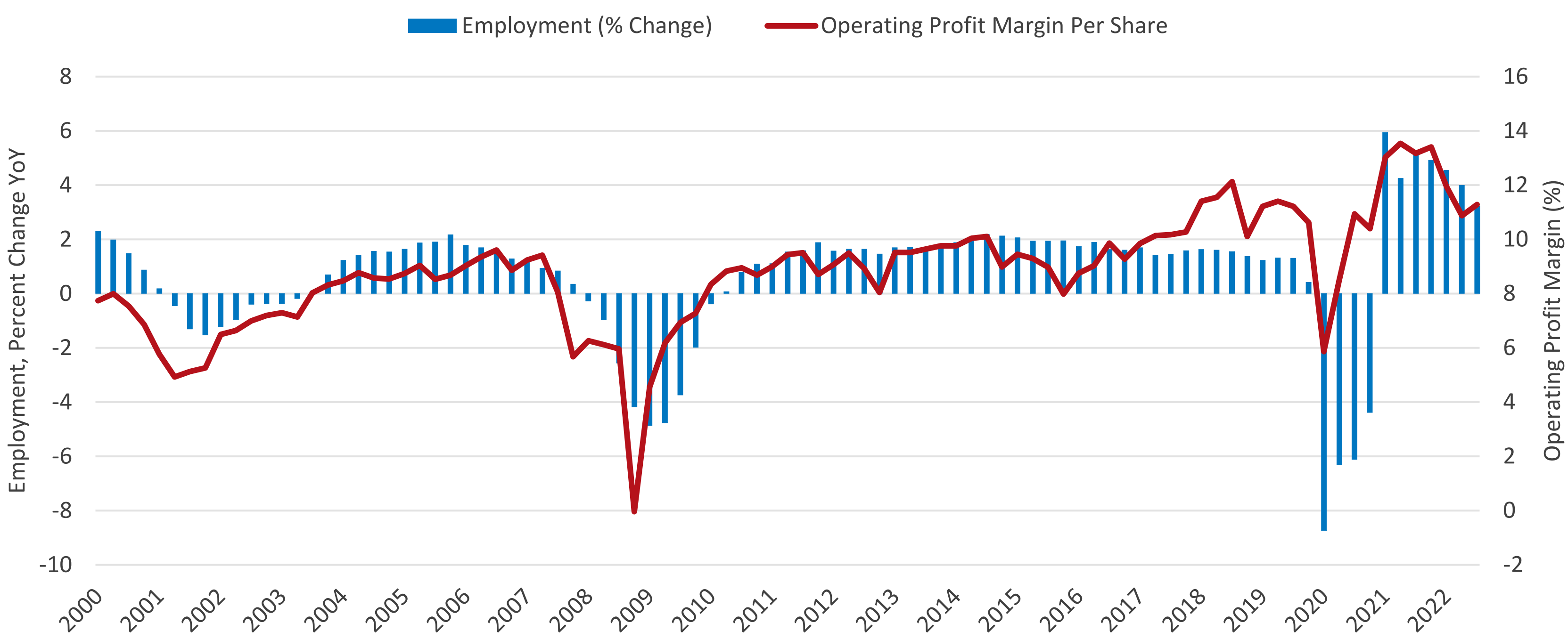
Data sources: Refinitiv, Robert Shiller, Schroders Economics Group

Employment Costs Pressuring Margins

- Following the COVID-19 pandemic, the growth rate of employment climbed well above prior years' rate as people have returned to the labor market and demand for workers intensified.
- Due to higher labor costs and the increased cost of goods and services, profit margins – a lagging indicator – are showing signs of declining from elevated levels that existed both before and following the pandemic.

EMPLOYMENT AND PROFIT MARGINS GENERALLY TREND TOGETHER

S&P 500 Index Profit Margin and Employment, Percentage Change from Year Ago, Seasonally Adjusted



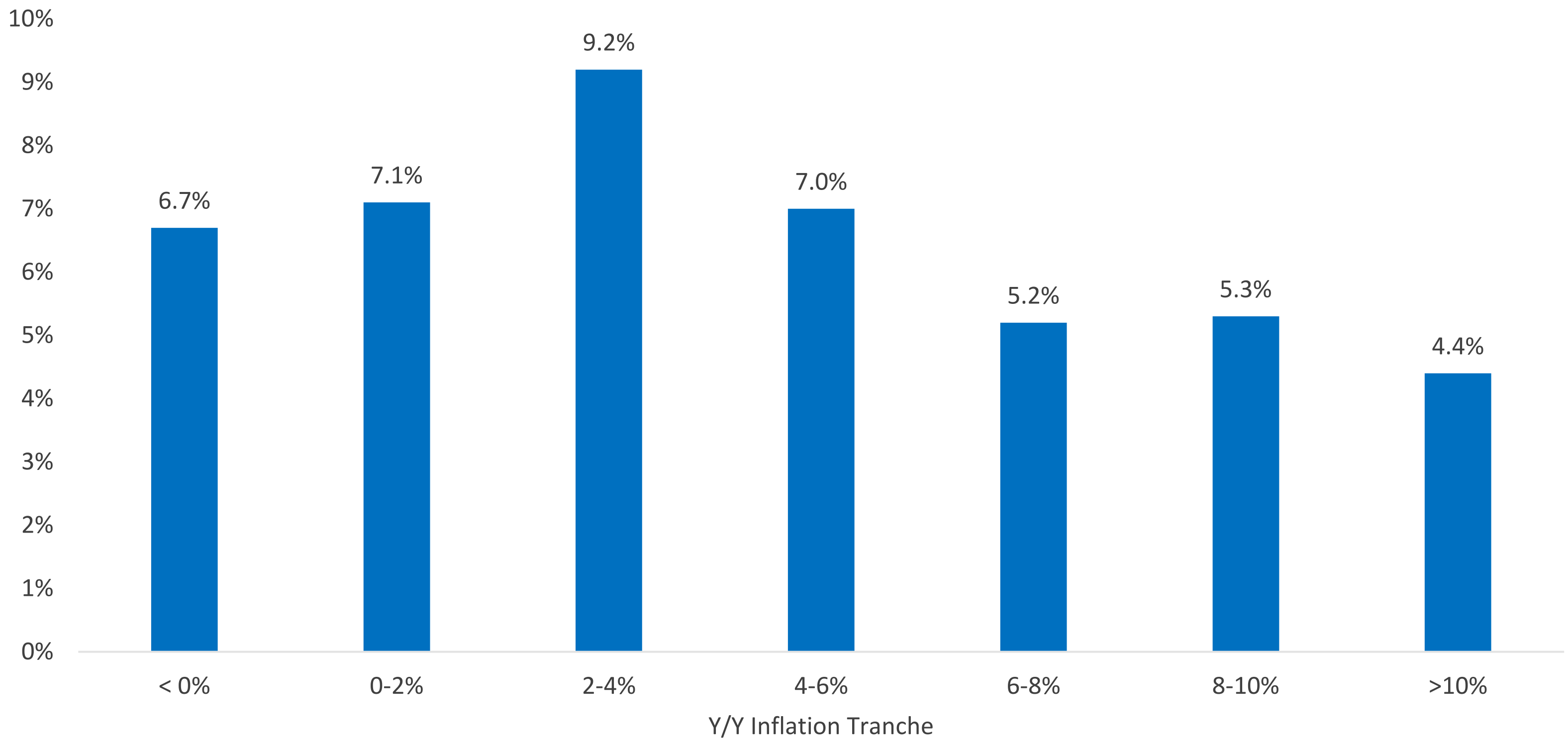
Data sources: Standard & Poor's and Bureau of Labor Statistics

Earnings and Inflation

- Earnings are a critical component of equity returns and generally improve over the long run during inflationary periods as companies pass along increased costs to consumers and other businesses.
- Earnings have historically grown better during periods of lower inflation when cost increases are moderate.
- In periods of high inflation, rapidly rising costs put pressure on profit margins, which limits earnings growth.

EARNINGS GROWTH IS BETTER IN MILD INFLATIONARY ENVIRONMENTS

S&P 500 Average Quarterly Earnings Growth by Inflation Tranche (1950 - Current)



Data sources: Strategas and Standard & Poor's

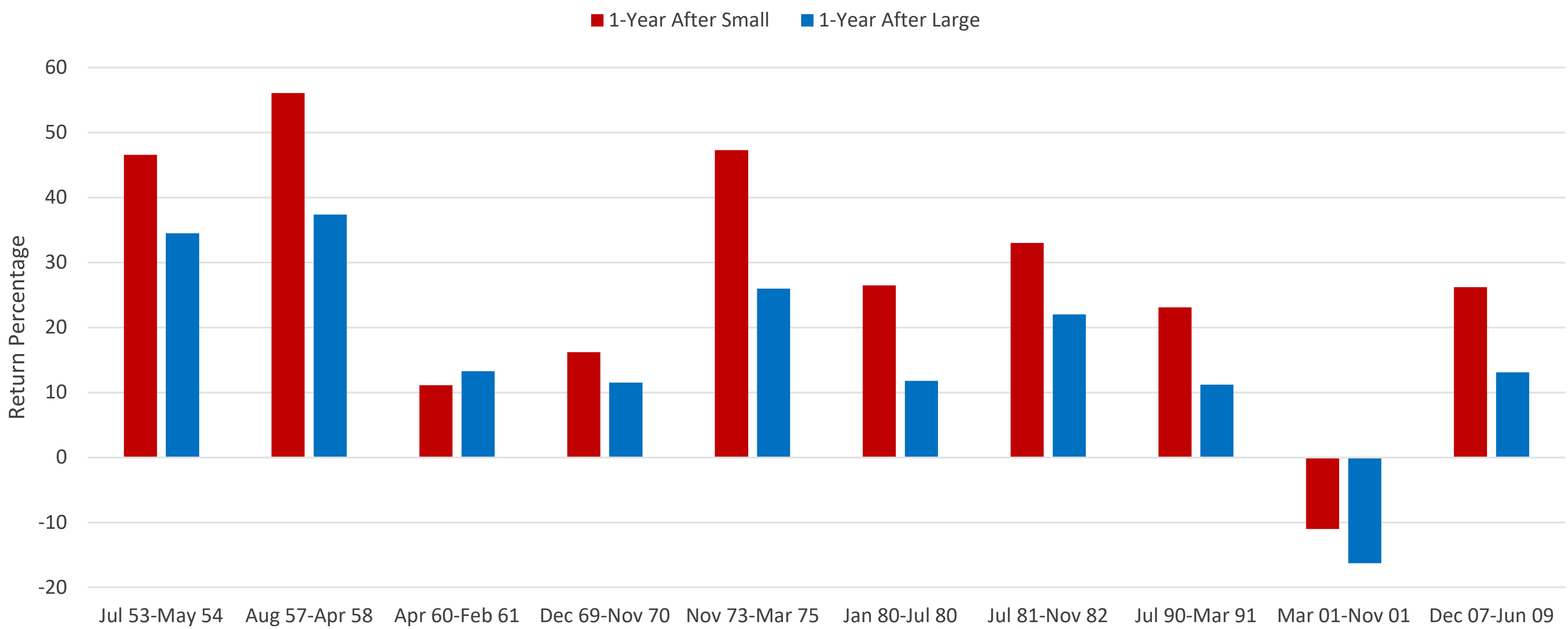
WHO COMES OUT ON TOP?

Small Cap Stocks and the Recession Rally

- Small cap stocks have historically outperformed during recessions and the recovery period after a recession, as smaller companies tend to benefit most from improving economic conditions.
- Large cap stocks have the historical advantage during the latter phases of the economic expansion and the initial slowdown, as these companies often have the resources to weather the initial economic downturn.

INVESTORS HAVE BENEFITTED FROM SMALL CAP EXPOSURE IN RECESSION RECOVERY

Small Cap versus Large Cap Relative Performance One Year After Recession



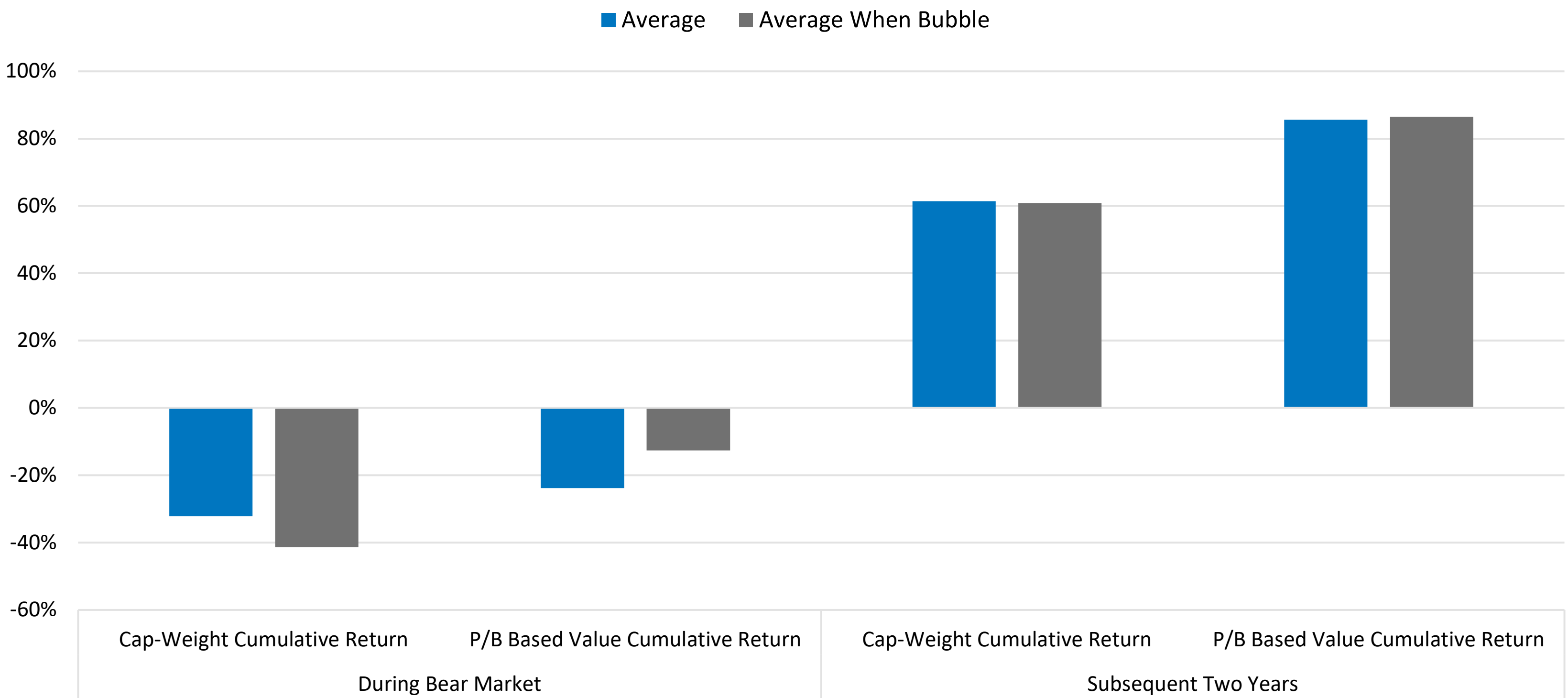
Data sources: Center for Research in Security Prices (CRSP), The University of Chicago Booth School of Business, and Jefferies

Value's Bear Market Advantage

- Value does not outperform growth in all periods, but value often outperforms growth in the two years following a bear market.
- The outperformance was more substantial during the Nifty Fifty/Oil Crisis and Technology Bubble bear markets.
- The one exception in the past several decades was the bear market tied to fiscal tightening during the Vietnam War.

VALUE HAS A HISTORY OF OUTPERFORMING GROWTH AFTER A BEAR MARKET

Cap-Weighted Cumulative Return vs. Price-to-Book Based Value Cumulative Return

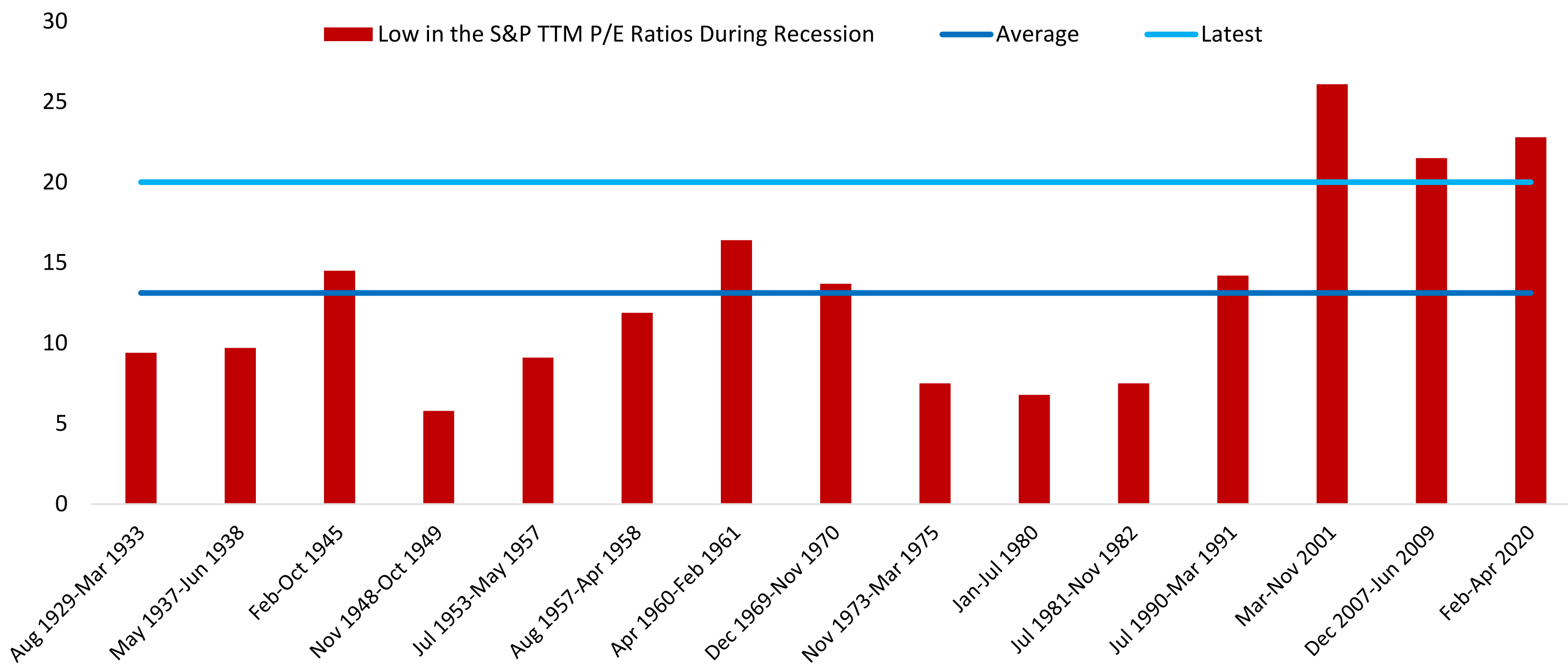


Data sources: Research Affiliates, FactSet, CRSP, and Compustat

- Equity valuations risk further declines if economic conditions deteriorate further.
- Previous recessionary lows in market valuation were materially below the current level and that of the most recent three recessions, but capital markets differed in those periods. A return to valuations below ten times earnings is unlikely without extremely weakened conditions.
- Equity valuations, which fell from elevated levels during the technology bubble, continued to decline after the end of the recession in 2001.

THE CURRENT MARKET VALUATION IS ALIGNED WITH RECENT RECESSION LOWS BUT IS ABOVE AVERAGE

S&P 500 Index Price/Trailing Twelve Month Earnings Multiple Recessionary Lows



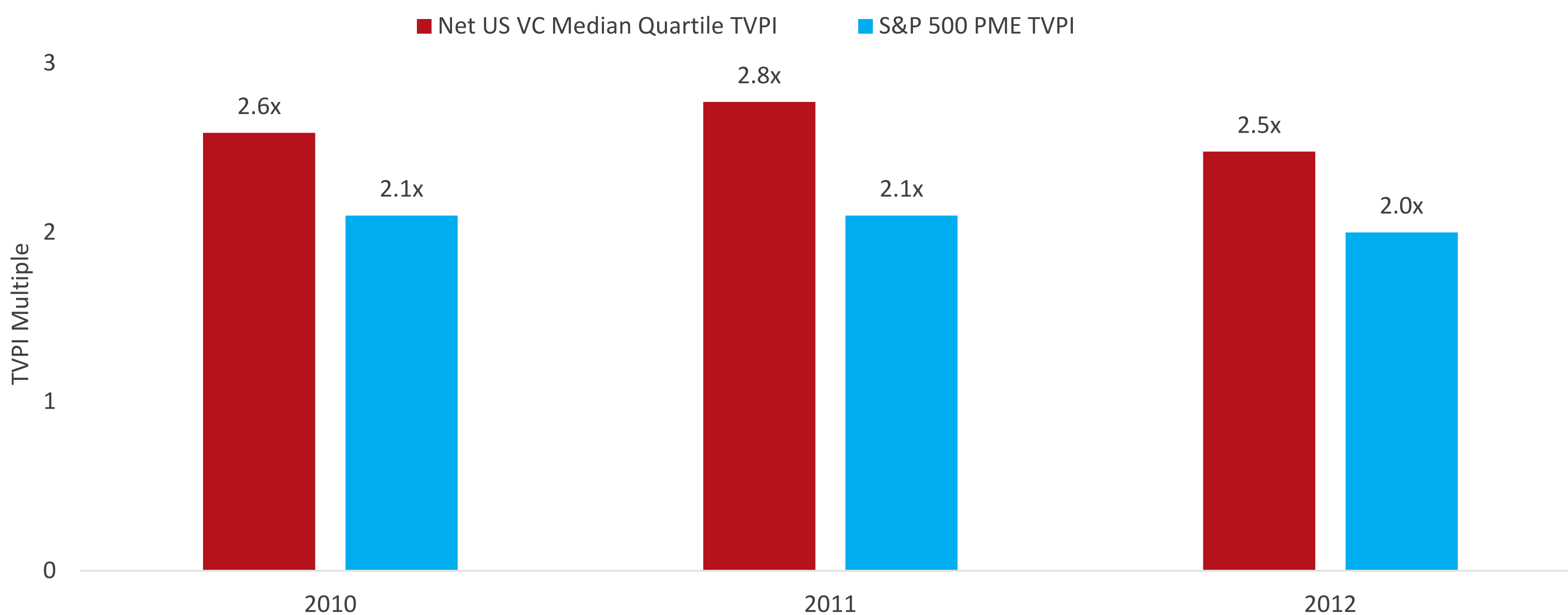
Data sources: Robert Shiller, NBER, and Standard & Poor's

Venture Capital is Tough to Time

- Private capital commitments made during challenging economic periods have a history of performing well, as capital can be deployed during a period of capital scarcity.
- The technology industry witnessed thousands of laid-off workers in 2022 from many of the largest technology companies, most of whom were hired by others within only a few months, providing skilled employees to other companies.
- Many successful companies, such as LinkedIn and Uber, were founded during recessionary years.

VENTURE CAPITAL OUTPERFORMED THE REBOUNDING S&P 500 INDEX FOLLOWING THE GFC

Great Financial Crisis Net U.S. Venture Capital Median Total Value to Paid-In Capital



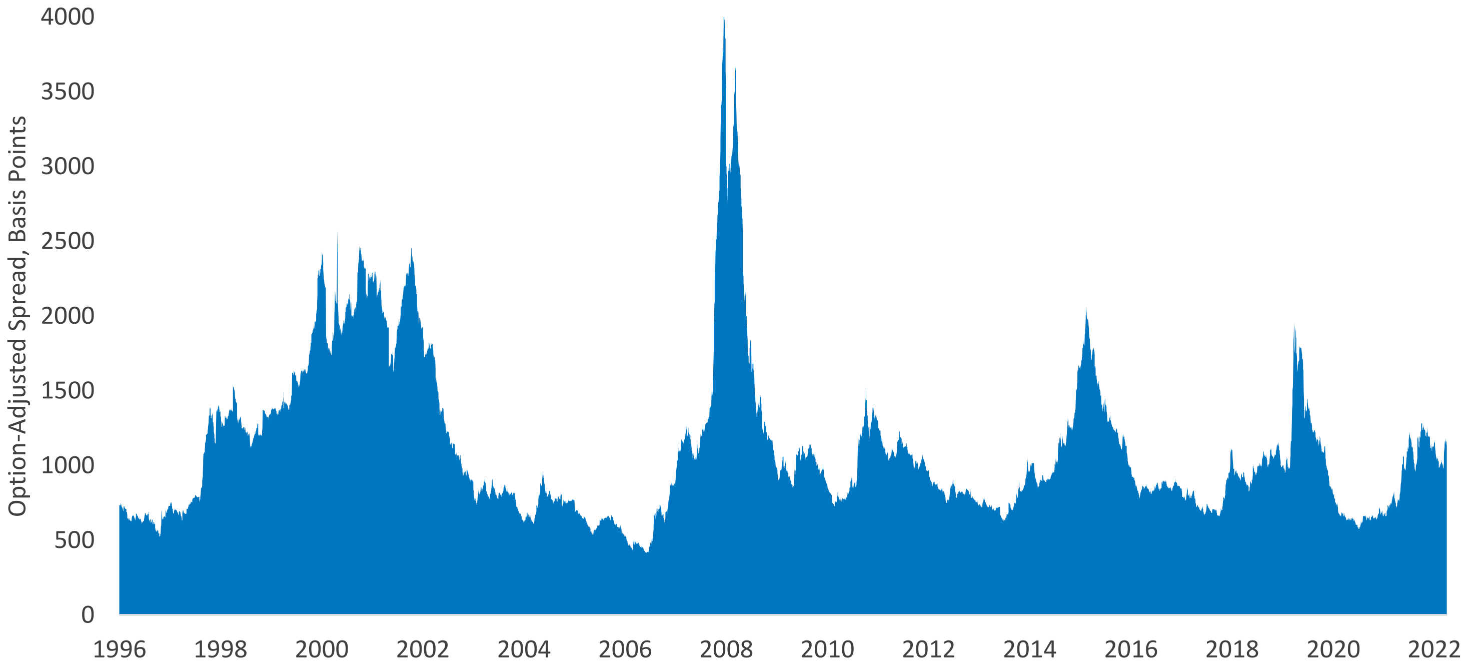
Data source: PitchBook

Recession Leads to Opportunity in Distressed Debt

- Prices in the below-investment-grade credit space have fallen as rising rates impacted debt issued at low yields over the past decade. Still, higher quality issues have maintained tight credit spreads to Treasuries.
- The lowest quality levels (CCC) have witnessed substantial spread widening relative to higher quality issues (BB). This suggests that opportunities may develop further if economic conditions deteriorate and credit standards continue to increase, especially for stressed refinancing.

RECESSIONS PRESENT OPPORTUNITIES IN DISTRESSED CREDIT

ICE BofA CCC and Below High Yield Index Option-Adjusted Spread



Data source: FactSet

CONCLUSION

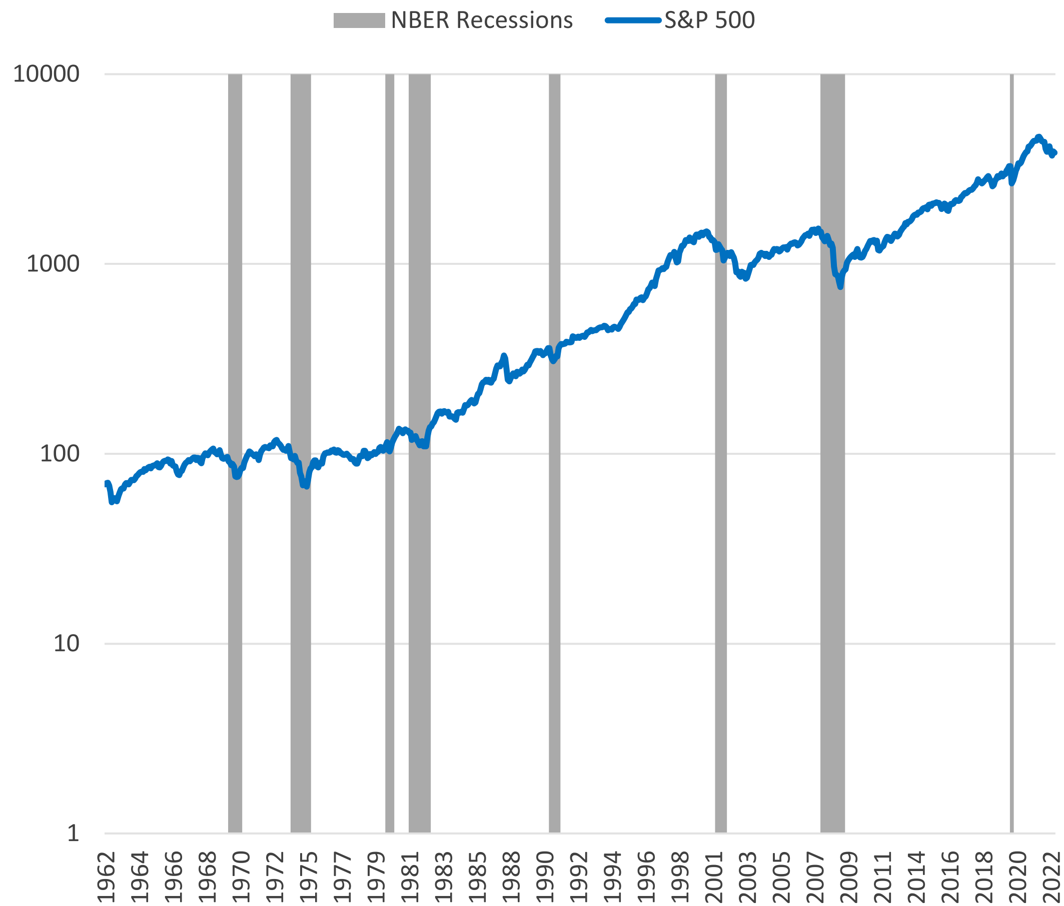
Whether a soft landing, mild recession, or deep recession develops, investors are best served by remembering the market's long-term upward trajectory.

Recessions create a repricing of assets that brings opportunities for long-term investors to provide capital when market pricing offers the greatest potential for reward. When the NBER finally announces that a recession has begun, the recovery has likely already started.

Conditions may deteriorate further, but markets have a long-term view and will likely improve when that deterioration slows. With many assets now offering a suitable return premium, we believe investors should be optimistic.

PRIOR RECESSIONS HAVE BEEN A BUYING OPPORTUNITY FOR LONG-TERM INVESTORS

S&P 500 Index and Recessions, Log Scale



Data sources: U.S. Federal Reserve and FactSet

Please save the date for our tenth FEG Investment Forum in Cincinnati on September 18–20, 2023.

During our three-day event, we will bring together top investment and philanthropic minds to discuss industry and economic trends. Formal invitations will be sent in Spring 2023. Until then, save the date!

SAVE THE DATE!

FEG INVESTMENT FORUM

Cincinnati | September 18–20, 2023

FEG's Podcast features some of the world's leading investment, economic, and philanthropic minds who provide insight for institutional investors.

We recently held the FEG Hockey Classic Event, so our latest podcasts featured two great guests with hockey backgrounds who share their stories and experiences.

HOCKEY MAJIC

Xavier Majic, Founder & CIO at Maple Rock Partners

Former NHL player Xavier Majic discusses his unusual path to finance, the many similarities between professional hockey and investing, the differences between being a great captain and a great coach, and how being willing to look stupid can lead to some incredibly smart results.

CINCINNATI ICEBREAKERS

Frank Yantek, Co-founder of The Cincinnati IceBreakers

The central point of the FEG Hockey Classic is to organize a fundraiser for The Cincinnati IceBreakers. Listen as they discuss the profound impact of being a part of organized sports, the mastery and athleticism sled hockey requires, and the value of donors' dollars.

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Monthly economic commentary and in-depth asset class review

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The S&P 500 Index is a capitalization-weighted index of 500 stocks. The S&P 500 Index is designed to measure the performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

Standard deviation is a measure of the dispersion of a set of data from its mean.

All data as of March 2023, unless otherwise specified.



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CITY OF GROSSE POINTE WOODS
EMPLOYEES RETIREMENT SYSTEM

ACTUARIAL EXPERIENCE STUDY

April 24, 2023

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

April 24, 2023

Board of Trustees
City of Grosse Pointe Woods Employees Retirement System

Re: Actuarial Experience Study

Dear Board:

The following report presents the results of an actuarial experience study of the assumptions and methods used for actuarial valuation purposes for the City of Grosse Pointe Woods Employees Retirement System. In the course of the analysis, we compiled plan experience from 2017 through 2022. While we cannot verify the accuracy of all the information provided, the supplied information used for performance of the annual actuarial valuations or compiled from prior year annual reports was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe it has produced appropriate results.

The report includes a review of demographic and economic experience, a comparison of this experience to current actuarial assumptions, our recommendations for consideration regarding changes in assumptions or methods to be effective for the July 1, 2023 actuarial valuation, and the estimated actuarial impact of these suggested changes. We believe implementing the recommended changes will assist in achieving the objective of developing costs that are stable, predictable, and represent our best estimate of anticipated experience.

It is important to remember that the ultimate cost of your retirement plan is independent of any actuarial assumptions or methods used throughout the valuation process. This cost will be the sum of the benefits paid from the fund and the administrative expenses incurred, less any net investment gains received. Future actuarial measurements may differ significantly from current measurements due to such factors as: plan experience differing from that anticipated by assumptions; changes in assumptions; increases or decreases expected as part of the natural operation of the methodology used (such as the end of an amortization period); changes in plan provisions or applicable law.

The actuarial measurements included in this report are based on actuarial asset values as of July 1, 2022 and would be different if market asset values were used instead of actuarial asset values.

Our analysis used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models that apply the funding and accounting rules to generate the results. All internally developed models are reviewed as part of the valuation process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.

Foster & Foster does not provide legal, investment or accounting advice. Thus, the information in this report is not intended to supersede or supplant the advice or the interpretations of the plan or its affiliated legal, investing or accounting partners.

The undersigned is familiar with the immediate and long-term aspects of pension valuations and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All sections of this report are considered an integral part of the actuarial opinions.

Respectfully submitted,

FOSTER & FOSTER INC.

____

Jason L. Franken, FSA, EA, MAAA

ACTUARIAL STANDARDS OF PRACTICE

The Actuarial Standards Board (ASB) is responsible for determining which actuarial activities are the best representations of generally accepted actuarial principles, and is also responsible for issuing guidance in the form of Actuarial Standards of Practice (ASOPs) to help actuaries in various practice areas deliver results and recommendations that are consistent with those representations. Generally speaking, ASOPs identify what the actuary should consider, document, and disclose when performing actuarial assignments.

The experience study and related measurements of benefit obligations for the plan are subject to the “coordinated guidance” provided in various ASOPs, including but not limited to:

- ASOP No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*, which ties together the standards shown below, provides guidance on actuarial cost methods, and addresses overall considerations for measuring pension obligations and determining plan costs or contributions
- ASOP No. 23, *Data Quality*
- ASOP No. 25, *Credibility Procedures*
- ASOP No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*
- ASOP No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations*
- ASOP No. 44, *Selection and Use of Asset Valuation Methods for Pension Valuations*
- ASOP No. 51, *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions*
- ASOP No. 56, *Modeling*

This report refers to ASOPs by number (e.g. ASOP No. 4) throughout. It is important to keep in mind that this experience study report only reflects the guidance provided in the final releases of the above-mentioned ASOPs issued by the ASB on or before the date of this report. The results provided in this report reflect the requirements of, and are consistent with, the applicable above-mentioned Actuarial Standards of Practice. When applicable, details from the relevant ASOP will be provided in the report section associated with a particular analysis or topic.

EXPERIENCE REVIEW SUMMARY

Below is a summary of our key findings and suggested changes for your consideration. The remainder of the document provides details of our analysis, documents our suggestions, and determines the estimated corresponding actuarial impact.

- Investment Return – We propose a discussion with your investment advisor on the long-term expected return of the current asset allocation, with consideration given to what expenses are netted against such returns.

- Payroll Growth – We recommend updating the payroll growth assumption from 3.50% to 3.00%.

- Retirement Rates – We recommend adjusting the age-based retirement tables.

- Termination Rates – We recommend adjusting the age and service-based termination rates.

- Disability Rates – We recommend simplifying the disability rate to 0.20% for general employees and 0.60% for public safety employees.

- Assumed Expenses – We recommend adding the cost of administrative expenses paid from the trust.

- Amortization Period – We recommend decreasing the amortization period from 25 years to 15 years.

REVIEW OF ECONOMIC ASSUMPTIONS

ASOP No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*, provides guidance to actuaries in selecting (including giving advice on selecting) economic assumptions – primarily investment return, discount rate, post-retirement benefit increases, inflation, and compensation increases – for measuring obligations under defined benefit pension plans.

Throughout the remainder of this section, we have used the standards set forth in ASOP No. 27 as a guideline for reviewing and if applicable, selecting recommended changes to the following economic actuarial assumptions and methods:

- Investment Return
- Salary Increases
- Payroll Growth

Please keep in mind that ASOP No. 27 (and ASOP No. 35) recognizes a range of reasonable assumptions and states "the actuary should recognize the uncertain nature of the items for which assumptions are selected and, as a result, may consider several different assumptions reasonable for a given measurement. The actuary should also recognize that different actuaries will apply different professional judgment and may choose different reasonable assumptions. As a result, a range of reasonable assumptions may develop both for an individual actuary and across actuarial practice."

Investment Return

The investment return assumption is critical in the actuarial valuation since it determines the portion of assets that will come from investment income rather than contributions from the plan sponsor and its participants. The investment return assumption should be determined based on the long-term rate of return (net of investment-related fees) the plan expects to earn over the life of the plan. The assumed rate of investment return is currently 7.50% per year compounded annually, net of both investment-related expenses and administrative expenses.

We believe that the decision to modify the investment return assumption shall be made based upon input from your investment professionals, reflecting any significant changes to the asset allocation, and their judgment of capital market returns. Keep in mind, however, that this assumption should reflect the best estimate of investment returns expected to be realized until no participants remain, which could be 50+ years from now.

ASOP No. 27 provides that in developing a reasonable assumption, the actuary may consider a broad range of data and other inputs, including the judgment of investment professionals. The data that may be considered includes: current yields to maturity of fixed income securities; forecasts of inflation, GDP growth, and total returns for each asset class; historical and current investment data (including real and nominal returns); the inflation and inflation risk components implicit in the yield of inflation-protected securities; dividend yields, earnings yields, real estate capitalization rates; and historical plan performance.

For purposes of reviewing the investment return assumption, a building block approach is often used, whereby the actuary determines the weighted average expected real rate of return for the plan's target investment portfolio and then adjusts for inflation and expenses not reflected in the real rates of return. Foster & Foster is an actuarial firm, and we do not have the required expertise to produce our own capital market assumptions. For this reason, ASOP No. 27 addresses that the actuary will often collect capital market assumptions from external sources in order to determine the forward-looking expected arithmetic and/or geometric returns. The capital market assumptions can be broadly classified into the following categories: expected returns by asset class; standard deviation by asset class; and correlation coefficients between asset classes. This information was not available for our analysis as part of this study, but if it can be provided, we can revisit to give additional insight.

In the meantime, we can look to national assumption surveys for additional information. NASRA released updated information in November 2022 to their ongoing summary of investment return assumptions used by public employers. While their survey looks at large statewide funds (e.g., Michigan Municipal, Public Schools, and State Employees' systems are included), the results are a common source for information for all public systems. Figure 1 below, taken from NASRA's website, shows that an assumption from 7.0% to 7.5% is most common among respondents. Figure 2 shows how discount rates are trending down over the last 22 years, with a current median of 7.00%.

Figure 1

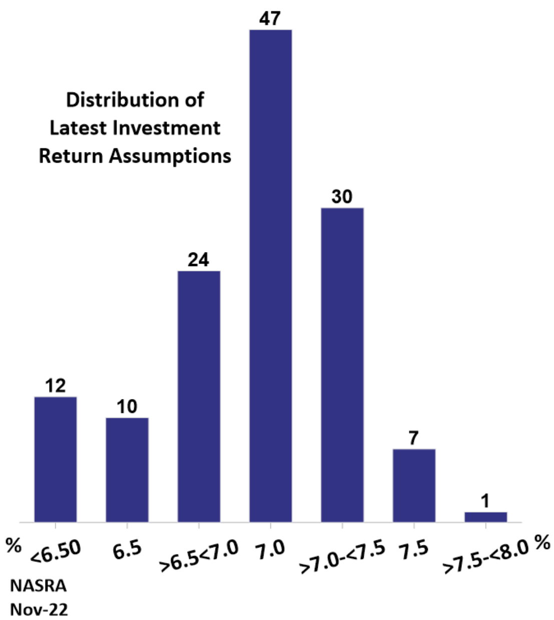
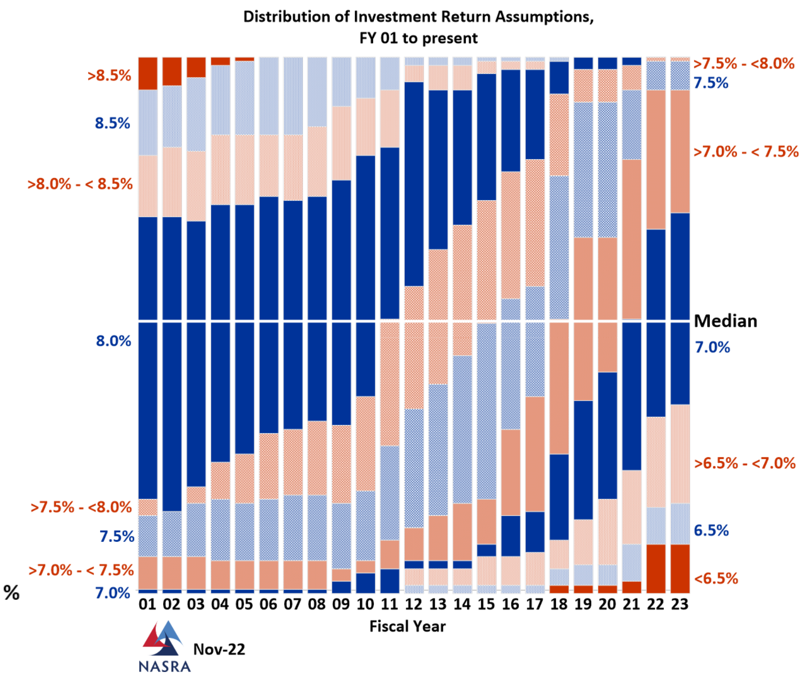


Figure 2



Based on the relevant data discussed in this section, we believe there should be a discussion surrounding the continued use of the current 7.50% assumption. Included in that discussion should be consideration of what expenses (e.g., investment related, administrative) are netted against expected returns to arrive at the final investment return assumption. The Michigan Public Act 202 requires municipal retirement systems in the state to submit information concerning their actuarial accrued liabilities and funded status based on uniform assumptions. The P.A. 202 interest rate assumption for the 2022 reporting year was 6.85%. For informational purposes, we have illustrated the impact of lowering the investment return assumption from 7.50% to 7.00% or 6.85% per year.

Investment Return	City Contribution	Increase / (Decrease)	City Contrib. as % of Payroll	UAAL	Funded Ratio
Current (7.50%)	1,878,969		33.15%	20,813,560	66.7%
6.85%	2,222,498	343,529	39.30%	25,594,709	62.0%
7.00%	2,141,055	262,086	37.86%	24,438,975	63.1%

Salary Increases

The salary increase assumption is used to project a participant's compensation while actively employed, from the valuation date until the assumed retirement age. This allows the actuary to estimate the pension benefit the member will be entitled to at retirement. Generally, a participant's compensation will increase over the long term in accordance with inflation, productivity growth, and merit adjustments. Currently, the valuation uses age-based assumption tables.

When reviewing the experience, we found that the salary increases were consistent with expectations. Due to the strong correlation between experience and expectations, we recommend keeping the existing age-based assumption tables.

Group	Total Expected Increase	Total Actual Increase
General	4.98%	5.11%
Public Safety	4.05%	3.95%
Total	4.51%	4.52%

Payroll Growth

The payroll growth assumption is used as part of the unfunded liability amortization calculation, allowing for the amortization rate to remain level as a percentage of payroll over time, assuming all assumptions are met. This is different from the salary increase assumption, since it is looking at the payroll for the entire membership, rather than any individual member. Currently, the valuation assumes that payroll will increase 3.50% each year.

We reviewed total payroll, as reported in the annual valuation report, over the last nine years. The results of this review across different time periods is shown below. The current assumption is higher than the historical data supports. We would recommend lowering the assumption to 3.00% to better reflect actual experience.

Lookback Period	Total
1 year	-4.2%
3 years	3.0%
5 years	2.8%
9 years	0.3%

The impact of the recommended changes will only impact contribution rates, since liabilities are not influenced by the payroll growth assumption. This assumption is used only for the amortization of the unfunded liabilities. The impact of only the recommended changes to the payroll growth rate assumption is an increase in the funding requirement.

Payroll Growth	City Contribution	Increase / (Decrease)	City Contrib. as % of Payroll	UAAL	Funded Ratio
Current	1,878,969		33.15%	20,813,560	66.7%
Proposed	1,940,657	61,688	34.33%	20,813,560	66.7%

REVIEW OF DEMOGRAPHIC/OTHER ASSUMPTIONS

ASOP No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations*, provides guidance to actuaries in selecting (including giving advice on selecting) demographic and other noneconomic assumptions for measuring obligations under defined benefit pension plans.

Throughout the remainder of this section, we have used the standards set forth in ASOP No. 35 as a guideline for reviewing and if applicable, selecting recommended changes to the following demographic and other noneconomic actuarial assumptions:

- Mortality Rates
- Retirement Rates
- Withdrawal Rates
- Disability Rates
- Administrative Expenses

Generally, demographic assumptions are based on actual plan experience with additional consideration for current trends. ASOP No. 35 states "the actuary should use professional judgment to estimate possible future outcomes based on past experience and future expectations and select assumptions based upon application of that professional judgment. For any given measurement, the actuary will typically be able to identify two or more reasonable assumptions for the same contingency."

Demographic trends generally remain consistent over time, absent significant changes in plan provisions. Therefore, the best true indicator of future experience is past experience. For each assumption, this analysis compares actual experience for the studied time period to the current assumptions used for purposes of the actuarial valuations. Note that actuarial assumptions reflect average experience over long periods of time. A change in actuarial assumptions generally occurs when experience over a period of years indicates a consistent pattern.

Mid-Year Decrements

Currently, the valuation assumes members will decrement at the beginning of the year. To better capture actual decrement timing, we developed the proposed decrement rates assuming mid-year decrements. The exhibits detailing the impact of the proposed changes illustrate the impact of the change in decrement timing.

Mortality Rates

The rate of mortality is the probability of death at a given age. As mortality rates have continued to decline over time, concern has increased about the impact of potential future mortality improvement on the magnitude of pension obligations. ASOP No. 35 discusses the importance of actuaries considering mortality improvements when measuring pension obligations. Specifically, an actuary should adjust mortality rates to reflect mortality improvement prior to the measurement date and include an assumption as to the expected mortality improvement after the measurement date, if reasonable.

The Society of Actuaries underwent a comprehensive experience study with the primary objective to develop mortality tables comprised solely of public-sector lives. Additionally, contributors to the study were asked to identify plan members as teachers, public safety personnel, or general employees. This helped provide new insights into the composition of gender-specific pension mortality by factors such as job category, specifically in the public sector. The published tables were released as the Pub-2010 Public Retirement Plans Mortality Tables.

The Retirement System is currently using the Pub-2010 Mortality Tables including generational improvements with Scale MP-2018. We believe that this is an appropriate assumption and recommend continued use of the Pub-2010 Mortality Tables.

Retirement Rates

Regular Retirement requires attainment of age 50 with 25 years of service, or age 55 with 20 years of service, or age 60 with 10 years of service. Currently, the valuation uses separate age-based tables.

Actual experience over the timespan of the study has shown fewer retirements than expected. Public Safety employees generally retire by age 65. While some general employees may not retire until age 70. Both groups experienced a spike in retirements around reaching regular retirement ages 55 and 60. Based on the recent retirements, we would recommend modifying the current assumption to use the following age-based tables.

Retirement Rates		
ge	General	Public Safety
50-53	20%	20%
54	35%	20%
55	35%	30%
56	35%	10%
57-58	20%	10%
59	40%	10%
60	40%	40%
61-62	10%	40%
63	10%	50%
64	10%	70%
65-66	30%	100%
67	40%	100%
68	50%	100%
69	70%	100%
70+	100%	100%

Adopting the recommended changes to the retirement rates would result in a decrease to the City's contribution when compared to the current assumptions.

Retirement Rates	City Contribution	Increase / (Decrease)	City Contrib. as % of Payroll	UAAL	Funded Ratio
Current	1,878,969		33.15%	20,813,560	66.7%
Mid-Year Decr	1,927,555	48,586	34.36%	21,139,361	66.4%
Proposed	1,868,667	(58,888)	33.32%	20,568,159	67.0%

Withdrawal Rates

The withdrawal rate, or termination rate, is the probability that a participant will separate employment from a cause other than disability, death, or retirement. Currently, the valuation uses service and age-based tables with a higher rate for participants with less than 5 years of service.

When reviewing the experience, we noticed terminations at a higher rate than expected for general employees and a lower rate than expected for public safety employees. Overall, general employees terminate at a higher rate than public safety employees while both have the highest termination rates at three years of service in the select period. We recommend maintaining the 5-year select period but modifying the current assumption rates to better reflect experience. See below for the proposed termination rate tables.

General Termination Rates						
Age	Service					
	0	1	2	3	4	5+
< 27	10.0%	15.0%	15.0%	20.0%	8.0%	7.0%
30	10.0%	15.0%	15.0%	20.0%	8.0%	7.0%
35	10.0%	15.0%	15.0%	20.0%	8.0%	5.0%
40	10.0%	15.0%	15.0%	20.0%	8.0%	4.0%
45	10.0%	15.0%	15.0%	20.0%	8.0%	3.0%
50	10.0%	15.0%	15.0%	20.0%	8.0%	3.0%
55+	10.0%	15.0%	15.0%	20.0%	8.0%	2.0%

Public Safety Termination Rates						
Age	Service					
	0	1	2	3	4	5+
< 27	3.0%	3.0%	4.0%	8.0%	3.0%	3.0%
30	3.0%	3.0%	4.0%	8.0%	3.0%	3.0%
35	3.0%	3.0%	4.0%	8.0%	3.0%	2.0%
40	3.0%	3.0%	4.0%	8.0%	3.0%	1.0%
45	3.0%	3.0%	4.0%	8.0%	3.0%	0.5%
50	3.0%	3.0%	4.0%	8.0%	3.0%	0.5%
55+	3.0%	3.0%	4.0%	8.0%	3.0%	1.0%

Adopting the recommended changes to the withdrawal rates would result in a slight increase to the City's contribution when compared to the current assumptions.

Withdrawal Rates	City Contribution	Increase / (Decrease)	City Contrib. as % of Payroll	UAAL	Funded Ratio
Current	1,878,969		33.15%	20,813,560	66.7%
Mid-Year Decr	1,927,555	48,586	34.36%	21,139,361	66.4%
Proposed	1,886,564	(40,991)	33.63%	20,994,495	66.5%

Disability Rates

The disability rate assumption is the probability that a member will become disabled while an active participant in the plan. Currently, the valuation uses age-based tables.

Over the timeframe of the study, no disabilities were granted under the plan. Given the low frequency of occurrences there is not enough experience in the data to support age-based tables. We recommend simplifying the current assumption to 0.20% for all general employees and 0.60% for all public safety employees.

Adopting the recommended changes to the disability rates would result in a slight increase to the City's contribution when compared to the current assumptions.

Disability Rates	City Contribution	Increase / (Decrease)	City Contrib. as % of Payroll	UAAL	Funded Ratio
Current	1,878,969		33.15%	20,813,560	66.7%
Mid-Year Decr	1,927,555	48,586	34.36%	21,139,361	66.4%
Proposed	1,911,444	(16,111)	34.08%	21,032,790	66.5%

Administrative Expenses

While pension plans exist to pay benefits to members in retirement, an overlooked liability of the plan is the payment of administrative expenses from the trust. If the expenses are not considered in the development of the annual required contribution, the amount being contributed is insufficient. As a result, we recommend including an estimate of administrative expenses in the development of the annual contribution.

There are a variety of different approaches used by actuaries to build in administrative expenses into the contribution including a reduction to the investment return assumption, or the inclusion of an average of prior years' administrative expenses. We recommend including the 3-year average of expenses paid, rounded to the nearest 1,000 in the required contribution. The 3-year average administrative expenses for the City's plan is about $57,000 which would increase the City's contribution requirement.

Amortization Period

As part of this analysis, we reviewed the amortization period used to determine the annual contribution. Currently, a 25-year open period is used. The current period does not allow for timely payment of the unfunded liability. Based on the June 30, 2022 valuation, the unfunded accrued liability is projected to increase indefinitely because the amortization payment is not enough to pay the accumulating interest on the unfunded liabilities.

Tables 1, 2 and 3 in the appendix show the impact of changing the amortization period. Table 1 shows the impact on recommended contributions of changing to a 20-year, 15-year or 10-year amortization. Table 2 summarizes the impact of all the proposed changes. Table 3 shows the projected impact of each scenario on the initial unfunded liability. A 20-year amortization period increases the recommended contribution by about 3.5%. However, assuming all assumptions are realized, the payment amount that just covers the interest accumulating on the unfunded liabilities and the entire initial unfunded remains for the duration of the plan's existence. A 15-year period results in an increase in recommended contributions of about 9.5%. This option begins to pay down a portion of the unfunded immediately, but results in 50% of the initial unfunded remaining after 40 years. A 10-year amortization payment increases the recommended contribution nearly 22%. With a 10-year amortization, the initial unfunded liability steadily retires.

We recommend changing the amortization period to a 15-year open amortization of unfunded liabilities. This 15-year amortization will create a more stable and predictable contribution pattern that better aligns the funding of the plan with the payment of the remaining benefit obligations.

SUMMARY

As stated throughout the content of this report, we have recommended that the Board consider several changes to the actuarial assumptions used for purposes of completing the annual valuations. It is our belief that these changes reflect sound actuarial principles, are in compliance with the Actuarial Standards of Practice, are our best estimate of anticipated future experience, and will assist in achieving the objective of developing costs that are stable and predictable. Below, we have provided a summary of the estimated actuarial impact for the discussed changes.

Impact of Changes - Current Amortization Period
Cost impacts reflect the current amortization period (25-year open).

Pension Benefits

nge	Assumption	Increase / (Decrease) City Contrib.	Increase / (Decrease) City Contrib. as % of Payroll	Increase / (Decrease) UAAL	Funded Ratio (EAN)
	Current	1,878,969		20,813,560	66.7%
(1)	6.85% Interest	343,529	6.15%	4,781,149	62.0%
(2)	7.00% Interest	262,086	4.71%	3,625,415	63.1%
(3)	Payroll Growth	61,688	1.18%	0	66.7%
(4)	Mid-Year Decrements	48,586	1.21%	325,801	66.4%
(5)	Retirement Rates	(58,888)	0.17%	(245,401)	67.0%
(6)	Withdrawal Rates	(40,991)	0.49%	180,935	66.5%
(7)	Disability Rates	(16,111)	0.93%	219,230	66.5%
(8)	Administrative Expenses	61,275	1.08%	0	66.7%
(9)	Combination 7.50% [1]	53,605	1.30%	(543,258)	67.3%
(10)	Combination 6.85% [1]	404,644	7.55%	4,222,427	62.5%
(11)	Combination 7.00% [1]	321,463	6.07%	3,070,195	63.6%

Supplemental Annuity

Change	Assumption	Increase / (Decrease) City Contrib.	Increase / (Decrease) UAAL	Funded Ratio (EAN)
	Current	277,208	1,570,995	59.6%
(1)	Combination 7.50% [1]	(11,414)	1,549,263	59.9%
(2)	Combination 6.85% [1]	25,730	1,812,737	55.8%
(3)	Combination 7.00% [1]	16,853	1,749,189	56.7%

[1] Reflects the combination of all the proposed assumption changes with the investment return as shown.

APPENDIX – IMPACT OF AMORTIZATION PERIOD CHANGE

The tables the following pages illustrate the impact of changing the amortization period. The first two show the impact on the contribution requirements. Table 3 shows the impact of various amortization periods on retiring the current unfunded liabilities.

Table 1 - Proposed Amortization Period – Recommended Contribution
The table below shows the impact of three amortization period scenarios on the contribution requirements. Costs include all proposed assumption changes and reflect the current 7.50% investment return. The baseline scenario reflects the current 25-year amortization period.

Change	Assumption	Increase / (Decrease) City Contrib.	Increase / (Decrease) City Contrib. as % of Payroll	Increase / (Decrease) UAAL	Funded Ratio (EAN)
	Combination 7.50%	1,932,574		20,270,302	67.3%
(1)	20 Years	198,027	3.52%	0	67.3%
(2)	15 Years	538,152	9.57%	0	67.3%
(3)	10 Years	1,234,013	21.94%	0	67.3%

Table 2 - Proposed Amortization Period – Impact of All Proposed Changes
The table below shows the impact of all proposed changes (including a change to the proposed 15- year amortization period) at 7.50%, 6.85% and 7.00%.

Change	Assumption	Increase / (Decrease) City Contrib.	Increase / (Decrease) City Contrib. as % of Payroll	Increase / (Decrease) UAAL	Funded Ratio (EAN)
	Current	1,878,969		20,813,560	66.7%
(1)	All - 7.50%/15 Yr. Amort.	591,757	10.87%	(543,258)	67.3%
(1)	All - 6.85%/15 Yr. Amort.	1,198,378	21.66%	4,222,427	62.5%
(2)	All - 7.00%/15 Yr. Amort.	1,053,055	19.07%	3,070,195	63.6%

Table 3 – Proposed Amortization Period – Projected Unfunded Liabilities

The table below illustrates the impact of the amortization period on the projected funding progress.

	25-Year Amort.		20-Year Amort.		15-Year Amort.		10-Year Amort.	
Year	Balance	Payment	Balance	Payment	Balance	Payment	Balance	Payment
2022	20,270,302	1,292,174	20,270,302	1,476,162	20,270,302	1,792,177	20,270,302	2,438,709
2023	20,401,488	1,300,536	20,203,700	1,471,312	19,863,984	1,756,253	19,168,962	2,306,207
2024	20,533,523	1,308,953	20,137,317	1,466,478	19,465,811	1,721,049	18,127,462	2,180,905
2025	20,666,413	1,317,425	20,071,152	1,461,660	19,075,619	1,686,551	17,142,549	2,062,411
2026	20,800,162	1,325,951	20,005,204	1,456,857	18,693,248	1,652,744	16,211,148	1,950,354
2027	20,934,777	1,334,532	19,939,473	1,452,070	18,318,542	1,619,615	15,330,354	1,844,387
2028	21,070,263	1,343,169	19,873,958	1,447,299	17,951,347	1,587,150	14,497,415	1,744,176
2029	21,206,626	1,351,862	19,808,658	1,442,544	17,591,512	1,555,335	13,709,732	1,649,410
2030	21,343,871	1,360,611	19,743,573	1,437,804	17,238,890	1,524,158	12,964,846	1,559,794
2031	21,482,005	1,369,416	19,678,702	1,433,080	16,893,337	1,493,607	12,260,431	1,475,046
2032	21,621,033	1,378,279	19,614,044	1,428,371	16,554,710	1,463,667	11,594,289	1,394,903
2033	21,760,961	1,387,199	19,549,598	1,423,678	16,222,871	1,434,328	10,964,340	1,319,114
2034	21,901,794	1,396,177	19,485,364	1,419,000	15,897,684	1,405,577	10,368,618	1,247,443
2035	22,043,538	1,405,212	19,421,341	1,414,338	15,579,015	1,377,402	9,805,263	1,179,666
2036	22,186,200	1,414,307	19,357,528	1,409,691	15,266,734	1,349,792	9,272,517	1,115,572
2037	22,329,785	1,423,460	19,293,925	1,405,059	14,960,713	1,322,736	8,768,716	1,054,959
2038	22,474,299	1,432,672	19,230,531	1,400,442	14,660,825	1,296,221	8,292,289	997,641
2039	22,619,749	1,441,944	19,167,346	1,395,841	14,366,949	1,270,239	7,841,747	943,436
2040	22,766,140	1,451,276	19,104,368	1,391,255	14,078,963	1,244,777	7,415,684	892,177
2041	22,913,479	1,460,669	19,041,596	1,386,683	13,796,750	1,219,825	7,012,770	843,703
2042	23,061,771	1,470,122	18,979,031	1,382,127	13,520,194	1,195,374	6,631,747	797,862
2043	23,211,023	1,479,636	18,916,672	1,377,586	13,249,182	1,171,413	6,271,426	754,512
2044	23,361,241	1,489,212	18,854,517	1,373,059	12,983,602	1,147,932	5,930,683	713,517
2045	23,512,431	1,498,850	18,792,567	1,368,548	12,723,345	1,124,921	5,608,453	674,750
2046	23,664,600	1,508,550	18,730,820	1,364,051	12,468,306	1,102,372	5,303,731	638,089
2047	23,817,754	1,518,314	18,669,277	1,359,570	12,218,379	1,080,275	5,015,565	603,420
2048	23,971,898	1,528,140	18,607,935	1,355,102	11,973,462	1,058,621	4,743,056	570,635
2049	24,127,040	1,538,030	18,546,795	1,350,650	11,733,454	1,037,401	4,485,353	539,630
2050	24,283,186	1,547,984	18,485,856	1,346,212	11,498,257	1,016,606	4,241,652	510,311
2051	24,440,342	1,558,002	18,425,117	1,341,789	11,267,775	996,229	4,011,192	482,584
2052	24,598,516	1,568,085	18,364,578	1,337,380	11,041,912	976,259	3,793,254	456,364
2053	24,757,713	1,578,233	18,304,238	1,332,986	10,820,577	956,690	3,587,157	431,569
2054	24,917,941	1,588,447	18,244,096	1,328,606	10,603,679	937,513	3,392,257	408,121
2055	25,079,206	1,598,728	18,184,152	1,324,241	10,391,128	918,721	3,207,946	385,946
2056	25,241,514	1,609,074	18,124,404	1,319,890	10,182,838	900,305	3,033,650	364,977
2057	25,404,873	1,619,488	18,064,853	1,315,553	9,978,723	882,258	2,868,823	345,147
2058	25,569,289	1,629,969	18,005,498	1,311,231	9,778,700	864,574	2,712,952	326,394
2059	25,734,769	1,640,518	17,946,337	1,306,922	9,582,685	847,243	2,565,550	308,660
2060	25,901,320	1,651,135	17,887,371	1,302,628	9,390,600	830,260	2,426,157	291,890
2061	26,068,949	1,661,821	17,828,599	1,298,348	9,202,366	813,618	2,294,337	276,030

INVOICE

201 East Fifth Street, Suite 1600
Cincinnati, Ohio 45202

DATE	INVOICE #
4/30/23	202304142

BILL TO:
City of Grosse Pointe Woods
Employees Retirement System
Shawn Murphy
20025 Mack Plaza
Grosse Pointe Woods, MI 48236

Fee Schedule: includes CIS
.12% first $50 Million
.10% next $50 Million
.05% next $150 Million
.04% next $250 Million
.03% over $500 Million
Minimum annual fee $60,000

Professional Services for the period ***1/1/23-3/31/23***

								AMOUNT
Based on the market value of	$	39,957,058	@	12/31/22	=		$	14,345.00

Total Amount Due $ 14,345.00

Payment due upon receipt of invoice

Reference: DAVIS
Inception: 7/3/2014
Updated: 12/1/15 Prorated w/ Retiree HC Benefits
Note: Assets of Employee Retirement System and Healthcare Benefits Plan are aggregated for fee break purposes.

Remittance Information

Please include invoice number and make payable to Fund Evaluation Group

Mail: P.O. Box 639176, Cincinnati, OH 45263-9176
Wire or ACH: Fifth Third Bank, 38 Fountain Square Plaza, Cincinnati, OH 45263, R/T #042000314, Account #7027869440
Remittance information to accountsreceivable@feg.com

Comerica Bank

INSTITUTIONAL TRUST

GROSSE POINTE WOODS EMPLOYEES PENSION

Billing Period:	01/01/2023 - 03/31/2023
Due Date:	05/19/2023
Invoice No:	486088
Account No:	1055009530
Administrator:	Saquanda M. Nalls
Phone:	(313) 222-8708

TREASURER/CONTROLLER
CITY OF GROSSE POINTE WOODS
20025 MACK AVENUE
GROSSE POINTE WOODS, MI 48236

The following is a statement of transactions pertaining to your account(s). For further information, please review the enclosed detail.

Opening Balance	$3,000.00
Payment received through 04/10/2023	1,500.00
Current Period Charges	1,500.00
Balance Due	~~$3,000.00~~ $1,500.00

Please detach and return this portion of the statement with your check payable as indicated below

Account No.
1055009530

Invoice No.
486088

Due Date
05/19/2023

Total Balance Due
$3,000.00

Comerica Bank
Attn: Trust Fee Accounting Group
P.O. Box 67600
Detroit, MI 48267

ROSATI, SCHULTZ, JOPPICH & AMTSBUECHLER, P.C.
27555 Executive Drive, Suite 250
Farmington Hills, MI 48331
(248) 489-4100 Tax ID# 38-3107356

February 9, 2023

City of Grosse Pointe Woods
Attn: Frank Schulte, City Administrator
20025 Mack Plaza
Grosse Pointe Woods, MI 48236

Invoice # 1078930

In Reference To: City of Grosse Pointe Woods Retirement System & Retiree Health Care

Professional Services Rendered Through January 31, 2023

			Hrs/Rate	Amount
1/3/2023	DAW	Receipt/review of correspondence and Special Pension Board Meeting Agenda from Ms. Hoenicke	0.20 $145.00/hr	29.00
1/5/2023	DAW	Preparation for Special Meeting on 1/5/23	0.20 $145.00/hr	29.00
	DAW	Attend meeting	1.00 $145.00/hr	145.00
1/19/2023	DAW	Receipt/review correspondence from Pension Administrator requesting an amendment to Sec. 2.302 to reflect a collective bargaining change; Draft ordinance amendment; Correspondence with amendment to Pension Administrator	1.20 $145.00/hr	174.00
1/20/2023	DAW	Receipt/review correspondence from Treasurer to Attorney VanOverbeke regarding Pension Ordinance Amendment	0.20 $145.00/hr	29.00
1/23/2023	DAW	Receipt/review correspondence from Attorney VanOverbeke regarding pension calculation issue; Correspondence to Mayor and City Administrator	0.50 $145.00/hr	72.50

			Hrs/Rate	Amount
		regarding scheduling a closed session to discus this communication		
1/26/2023	DAW	Receipt/review correspondence from Recording Secretary with agendas and digital packets	0.50 $145.00/hr	72.50
	For professional services rendered		3.80	$551.00

Additional charges:

		Qty/Price	
1/5/2023	Attorney Mileage - Attend Pension Board meeting [D. Walling]	73 0.65	47.45
	Total costs		$47.45
	Total amount of this bill		$598.45
	Previous balance		$130.50
	Balance due		$728.95

Please include your Invoice Number on your payment. Thank you.

Attorney Summary

Name	Hours	Rate
Debra A. Walling, Associate	3.80	145.00

ROSATI, SCHULTZ, JOPPICH & AMTSBUECHLER, P.C.
27555 Executive Drive, Suite 250
Farmington Hills, MI 48331
(248) 489-4100 Tax ID# 38-3107356

March 8, 2023

City of Grosse Pointe Woods
Attn: Frank Schulte, City Administrator
20025 Mack Plaza
Grosse Pointe Woods, MI 48236

Invoice # 1079083

In Reference To: City of Grosse Pointe Woods Retirement System & Retiree Health Care

Professional Services Rendered Thru February 28, 2023

		Hrs/Rate	Amount
2/2/2023	DAW Attend meeting	1.60 $145.00/hr	232.00
	For professional services rendered	1.60	$232.00

Additional charges:

		Qty/Price	
2/2/2023	Attorney Mileage - Pension Meeting [D. Walling]	73 0.65	47.45
	Total costs		$47.45
	Total amount of this bill		$279.45
	Previous balance		$728.95
2/6/2023	Payment - thank you.. Check No. 774936313		($130.50)
	Balance due		$877.90

Rosati, Schultz, Joppich & Amtsbuechler, P.C.

Please include your Invoice Number on your payment. Thank you.

Attorney Summary

Name	Hours	Rate
Debra A. Walling, Associate	1.60	145.00